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J. G. GARSON, Esq., M.D., *Vice-President, in the Chair.*

The Minutes of the last meeting were read and signed.

The following presents were announced, and thanks voted to the respective donors:—

FOR THE LIBRARY.

From the ANTHROPOLOGICAL SOCIETY OF PARIS.—La Société, l'École et le Laboratoire d'Anthropologie de Paris à l'Exposition Universelle de 1889.

From the UNITED STATES GEOLOGICAL SURVEY.—Monographs XIII, XIV. Bulletins 48-53. Archæology of Ohio. By M. C. Read.

From the MUSEUM OF GENERAL AND LOCAL ARCHÆOLOGY (Cambridge).—Fifth Annual Report of the Antiquarian Committee to the Senate, November 26th, 1889.

From PROFESSOR AGASSIZ.—Annual Report of the Curator of the Museum of Comparative Zoology at Harvard College for 1888-89.

From the AUTHORS.—The New Dock Excavation at Southampton. By T. W. Shore, F.G.S., F.C.S., and J. W. Elwes.

—Eskimo Tales and Songs. By H. Rink and F. Beas.

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- From the AUTHOR.—The Central Eskimo. By Franz Boas.
 — The Indians of British Columbia. By Franz Boas, Ph.D.
 — The Houses of the Kwakiutl Indians, British Columbia. By Dr. Franz Boas.
 — Notes on the Snanaimuq. By Dr. Franz Boas.
 — On Some Recent Subsidences near Stifford, Essex. By T. V. Holmes, F.G.S., M.A.I.
 — The History of Human Marriage. Part I. By Edward Westermarck.
 — Les Premières Populations de l'Europe. Par le Marquis de Nadaillac.
 — Un Viaggio a Nias. Di Elio Modigliani.
 — Die Menschenrassen Europa's und Asien's. Von Dr. J. Kollmann.
 — Sulla Statura degli Italiani. Per il Dottor Ridolfo Livì.
 — L'Indice Cefalico degli Italiani. Per il Dott. Ridolfo Livì.
 — Die Grosshirnrinde in ihren Stellung zur Speichelsecretion. Von Gisbert Fluck.
- From the BATAVIAASCH GENOOTSCHAP VAN KUNSTEN EN WETENSCHAPPEN.—De Derde Javaansche Successie—Oorlog (1746-1755). Door P. J. F. Louw.
 — Tijdschrift voor Indische Taal-, Land- en Volkenkunde. Deel xxxiii. Afl. 2.
 — Notulen van de Algemeene en Bestuurs-Vergaderingen. Deel xxvii, Afl. 2; Register, 1879-1888.
- From the PUBLIC FREE LIBRARIES COMMITTEE, MANCHESTER.—Thirty-seventh Annual Report, 1888-9.
- From the SOCIÉTÉ DE GÉOGRAPHIE DE LISBONNE.—L'Incident Anglo-Portugais.
 — Importation abusive en Afrique par des sujets Anglais d'armes perfectionnées. Protestation présentée au Gouvernement Portugais par la Société de Géographie de Lisbonne.
- From the ROYAL SCOTTISH GEOGRAPHICAL SOCIETY.—The Scottish Geographical Magazine. Vol. vi. Nos. 1, 2.
- From the ESSEX FIELD CLUB.—The Essex Naturalist. Vol. iii. Nos. 7-9.
- From the K. K. AKADEMIE DER WISSENSCHAFTEN, WIEN.—Sitzungsberichte, philos.-histor. Classe. Band 117, 118; math.-naturw. Classe, I Abthlg., 1888, Nos. 6-10, 1889, Nos. 1-3; II Abthlg., a. 1888, Nos. 8-10, 1889, Nos. 1-3; b. 1888, Nos. 8-10, 1889, Nos. 1-3; III Abthlg. 1888, Nos. 7-10, 1889, Nos. 1-4; Register No. 12. Almanach, 1889.
- From KONGL. VITTERHETS HISTORIE OCH ANTIQVITETS AKADEMIEN.—Antiqvarisk Tidskrift för Sverige. Del. x. Häft 5.
- From the AKADEMIE DES SCIENCES DE CRACOVIE.—Bulletin International, 1889. Nos. 8-10.
- From the ACADEMY.—Boletín de la Academia Nacional de Ciencias en Córdoba. Tomo xi. Entrega 3a.
- From the ASSOCIATION.—Journal of the East India Association. Vol. xxii. No. 1.

- From the ASSOCIATION.—Proceedings of the Geologists' Association. Vol. xi. No. 5.
- Journal of the Royal Historical and Archæological Association of Ireland. Vol. ix. No. 80.
- From the INSTITUTE.—Proceedings of the Canadian Institute. Vol. vii. Fas. 1.
- From the UNIVERSITY.—Journal of the College of Science, Imperial University, Japan. Vol. iii. Part 3.
- From the SOCIETY.—Proceedings of the Society of Biblical Archæology. Vol. xii. Part 2.
- Proceedings of the Royal Geographical Society. Vol. xii. Nos. 1, 2.
- Proceedings of the Royal Society. Nos. 284–286.
- Proceedings of the Asiatic Society of Bengal. 1889. Nos. 1–6.
- Journal of the Asiatic Society of Bengal. Vol. lviii. Nos. 288–290; special number on "The Modern Vernacular Literature of Hindustan." By George A. Grierson, B.A., B.C.S.
- Journal of the Society of Arts. Nos. 1934–1942.
- Proceedings of the Philosophical Society of Glasgow. 1888–89.
- Bulletin de la Société Impériale des Naturalistes de Moscou. 1889. No. 2.
- Boletim da Sociedade de Geographia de Lisboa. 8A Serie. Nos. 7–8.
- Mittheilungen der Anthropologischen Gesellschaft in Wien. xix Band. Heft 3, 4.
- Arhiva Societății Științifice și Literare din Iași. 1889. Nos. 2, 3.
- From the EDITOR.—Journal of Mental Science. No. 116.
- Nature. Nos. 1050–1058.
- Science. Nos. 354–364.
- Revue Scientifique. Tom. xlv. Nos. 24–26. Tom. xlv. Nos. 1–6.
- Bullettino di Paletnologia Italiana. Tom. v. No. 9 a 11.

The following Paper was read by the Author:—

CHARACTERISTIC SURVIVALS *of the CELTS in HAMPSHIRE.*

By T. W. SHORE, F.G.S.

NOTWITHSTANDING the successive waves of conquest which have passed over the southern parts of England since the time when what is now called Hampshire was inhabited by Celtic people, the remains of these people, perhaps the earliest of its inhabitants we can distinctly trace, with the exception of the Palæolithic men, can be recognised amidst much that bears the marks of the Romans, Saxons, and Norsemen.

We have remains of the labour of the Celts of Hampshire, in the great earthworks they threw up for their castles of refuge, the so-called British camps, to which I have alluded in a previous paper read before this Institute.¹

We can follow at the present day some of the chief lines of communication between the Celtic tribes of that county, for these lines of road must have crossed the rivers at their natural fords, which still exist, and which with other geological considerations determined the courses of these roads.

We can see that the general distribution of the Celtic population must have been determined by the courses of the rivers and the direction of the river valleys, these being the areas best adapted for reliable supplies of food, and being separated from other similar areas by forest land which has only been cleared within historic time.

Occasionally we find the remains of old British canoes made from trunks of trees, charred in the interior for facility in working, and chipped and fashioned by rude tools.

We find in the peat, or a little below the surface of some of our cultivated fields, the stone and bronze implements and weapons used by the people of Hampshire in the British Neolithic and Bronze ages, and as these implements of stone and bronze are found in similar situations, no hard and fast line can be drawn between the periods of their use.

In the round huts of the charcoal-burners of the New Forest, of which a few still exist, we have, I think, a survival to the present day, in form, of the huts which were common in the Celtic period.

In the agricultural operation of chalking or marling heavy clay-land, by spreading chalk over it, we find the survival of a practice which Pliny tells us was in use in Britain in his time. Some of the largest chalk pits or quarries of Hampshire are so large, in comparison with the probable annual quantity of chalk which could have been taken from them and used in this way, that some of these pits in all probability mark the places where the old British people of this county first began to dig chalk.

As Romano-British remains and Roman coins have been found in or quite close to a considerable number of old villages in Hampshire, these villages as habitable sites must be as old as the Romano-British period.

Some of the industries of the Celtic period appear to have survived in Hampshire to the present day, such as that of osier working or basket-making.

¹ "The Distribution and Density of the old British population of Hampshire," *Journ. Anthropol. Inst.*, vol. xviii, No. 4.

The Hampshire Celts were not without their trade and commerce, which appears to have been carried on between the great natural port of Southampton Water and the Solent, and the opposite coast of France. The trade which we can trace was the export trade in tin by the Greek merchants of Marseilles, a rival trade to that of the Phœnicians, and carried on across Gaul. An ingot of tin has been dredged up between Lepe and Gurnard Bay. The ancient use of tin to mix with copper in the manufacture of bronze, must have been understood by the southern Celts as early as the British Bronze age. The tin trade survived at Southampton, where we still have the name remaining of "the tin shore," and also the old Stannaries house, until the 15th century. As this trade could scarcely have been revived again, at a port so far distant from the tin mines of Cornwall and Devon, if it had once died out, it was in all probability a continuous trade, a survival of the old British traffic until the time of the Venetians, whose records show that they shipped tin at Southampton.

The iron which was used by the Celts of Hampshire was probably a native production and manufactured on the spot. Caesar tells us that "iron is produced in the maritime parts of Britain, but the quantity of it is small." I have elsewhere¹ shown that the early manufacture of iron was carried on in Hampshire, where the sites of some of the old iron forges can be identified, as well as in Sussex and Kent. The chief Hampshire ironstone was derived from the beds of the Bracklesham age, in which it occurs in the form of nodules, and along the shores of the Solent this stone being rich in iron is even yet collected for shipment.

Another Celtic industry in Hampshire appears to have been that of salt-making at Hayling Island, and perhaps at other places on the coast. There can be little doubt that Hayling—anciently spelt Halinge—has derived its name from connection with salt-making, and from the Celtic word *hal*, salt. The salt works which still exist there, are in all probability an example of a survival of a Celtic industry to the present day. The salt of Britain must have been of some repute, as early as Romano-British time, for it is mentioned by St. Ambrose, who wrote in the fourth century.

Along the shores of Southampton Water various discoveries have from time to time been made of sites, which were evidently occupied as late as Romano-British time, and probably earlier, on account of their suitability both for defensive dwelling sites,

¹ "Old Ironworks in Hampshire," "The Antiquary," May, 1887, No. 89, vol. xv.

and for obtaining supplies of fish. These sites were commonly natural hillocks, protected on one or more sides by marshes, or inlets covered by the tidal water. On one such site protected by a marshy inlet on two sides, and on which the residence of the Superintendent of the Military Lunatic Asylum at Netley is now built, a number of Romano-British coins and many other remains of that date were found in digging for the foundations of the present buildings. Similar hillock sites have been found higher up at Woolston and Freemantle. Southampton Water appears to have been a favourite fishing water of the Celts from Neolithic time onwards. A fine neolithic weapon found near the shore at Freemantle has lately been added to the museum of the Hartley Institution. Relics of the Bronze age have also been found on the gravel terraces of the tidal part of the Itchen. At the present time the Southampton Water is frequented by thirty species of fish, and they were in all probability much more abundant in Celtic time than at present. The remains which have been found along the shores of this estuary, show that the Celts of this part of Hampshire, whether partly migratory or not, were probably acquainted with the migrations of the fish, and at least frequented the locality during the fishing seasons.

The early inhabitants of Hampshire appear to me to have possessed a system of coast defence. The remains of some of these defences still exist, and others can be traced. These defences must, I think, have been constructed to guard against enemies from the opposite side of the channel, rather than from British coast marauders. If so, they must either be the defences which the Belgæ broke through in their conquest and settlement in Hampshire, or more probably their own later defensive works, for the Belgæ were the last invaders of whom we have any trace before the time of the Romans. From its geographical configuration the coast of Hampshire would be convenient for attack, for a large offensive naval force could find shelter in the Solent and its harbours. The defences consist of earthworks, and appear to have been constructed to guard the chief inlets of the sea and entrances to the rivers.

There is evidence that the early population of Hampshire was mainly distributed along the river valleys, and their dry upper continuations.

The entrance to the Avon was guarded by the peninsular earthwork of Hengistbury, which consisted of a ditch and inner bank across the narrow neck of land connecting Hengistbury Head with the land to the westward. Although diminished somewhat in length by coast erosion, a great part of this entrenchment still remains.

The entrance to the country above the Lymington river was guarded by an earthwork now known as Buckland Rings, but which was I think known previously, and as late as the time of Richard II, by the name of Iernesburgh.

The entrance to the Beaulieu river appears to have been guarded by an earthwork at Exbury, of which the name only now remains.

The passage up the river Hamble appears to have been defended on both sides of it at Bursledon, and at Sarisbury at which latter place some traces remain.

The passage up the Itchen was guarded by an earthwork strongly placed on a river cliff known as Rockdone, and later as Bevois Mount, destroyed since the beginning of this century. There is reason for believing that the peninsular site on which the ancient part of Southampton is built between the two rivers Itchen and Test, was also a fortified position of the early inhabitants of Hampshire. The double ditches on the north and east sides of the town, dug deep enough to admit the flow and ebb of the tide, and which existed in their ancient condition as late as the sixteenth century, must have made this a strong defensive site, and from what we know of the other peninsular defensive works of the Celts in this county, we may, I think, conclude that the early inhabitants of Hampshire would not neglect this site, the most important of them all.

On the Test side of Southampton there is a trace of an earthwork at Bury Farm, Eling, where Romano-British remains have been found. The passage up the Test and the country on its western bank was protected by an entrenched earthwork, part of which still remains, and which is known as Tatchbury Mount. Close to the limit of the tidal flow in the river on the opposite side near Nursling, there yet remains a small part of what appears to have been another defensive work, but now almost destroyed by work in the construction of the old canal, and the railway which took its place. From this site I have obtained some early Roman coins and many articles of Romano-British date, including teeth of horses, probably from animals sacrificed at Celtic cremations. Tacitus tells us that the Belgæ burnt the bodies of their chiefs with fire, and sacrificed horses.

The passage up the Gosport creek into the country between Portsmouth Harbour and Southampton Water, was defended by an earthwork at Bury, a part of Alverstoke.

A complete fortification, which still exists on Hayling Island, known as Tunorbury, is situated close to the western entrance to Chichester Harbour, and if we pass beyond the eastern limit of Hampshire, we find what was formerly the entrance to

Pagham harbour guarded by a British earthwork, within which the mediæval church of Selsea was built and yet remains.

Such a chain of fortresses proves, I think, that the Celtic tribes of Hampshire were organised for coast defence.

We have in Hampshire two classes of early earthworks in the form of mounds, viz., first those which, whether thrown up by the Saxons or not, were used by them as burh mounds, and secondly those mounds concerning which there is no record or trace that they were ever used by the Saxons.

Of those which were used as Saxon burhs the great mounds on which the keeps of Carisbrook and Christ Church Castles were built, and which still exist, and the great mound on which the keep of Southampton Castle was built, are good examples. The questions who were the mound builders, and were these mound builders of different ages, and whether the Saxons utilised existing Celtic mounds, are interesting considerations. The evidence which Hampshire affords shows that there were Celtic mound-builders. On a high watershed between two dry upper valleys which lower down become the sources of streams flowing into the Test and Itchen; we have a remarkable mound known as Farley Mount. From its size it appears to be too large to have been constructed as an ordinary tumulus. It is situated on one of the highest positions of the watershed between the Test and Itchen, and has a ring-shaped entrenchment at some distance round it. Its use or degradation in the early part of last century, as the burial place for a noted horse, has not destroyed its Celtic features.

The mounds at Carisbrook, Christ Church, and Southampton may also have been surrounded by some outer ditch and bank before the keeps of the Norman Castles were built on them. As the fortification at Carisbrook is as old as Celtic time, the great mound there may be as old as its earliest entrenchments.

In the New Forest district we have two remarkable mounds still remaining, of far larger size than the numerous round barrows which still exist within this area. These are the mounds known as Black Bar at Linwood near Ellingham, and another known as the Butts on Bramshaw Plain. Both these great mounds appear to have been dwelling sites, on which huts could be erected. Black Bar is situated in a part of the New Forest which could easily have been converted into a lake by damming up a stream close to it, and the name Linwood confirms the probable former existence here of a small lake. Both these mounds are so remote from fortified places of the Saxon period, as to make it extremely improbable that they were ever used as Saxon defences. Their origin must therefore be ascribed to Celtic mound builders.

The mount at Walhampton, near Lymington, is probably another example of the same kind, and there are remains or traces of similar early mounds at Bevois Mount, Southampton, Wherwell, Cheriton, Burton near Christchurch, Sopley, Rowland's Castle and elsewhere. These early mounds, for the construction of which there does not appear to me to have been any sufficient reason in Saxon time, must I think have been thrown up by an earlier race of people, presumably the Celtic mound-builders of Hampshire.

Some of these early mounds must, I think, have been sites sacred to the Celtic people of this country.

Professor Rhys tells us in his Hibbert lectures on "The Origin and Growth of Religion,"¹ that the Celts of the British Islands had sacred mounds, which were known as the gods' mounds, the god being designated the "chief of the mound," and we are, I think, warranted in concluding that some of the mounds which remain in Hampshire were of this character. The evidence pointing to a fusion of part of the Celtic population of Hampshire with their Saxon conquerors is so strong, that I feel justified in partly basing my argument upon it in reference to Celtic survivals in that county concerning the early mounds. A number of ancient churches in Hampshire are built on artificial mounds. One of these is Corhampton in the valley of the Meon, which has a Saxon church on the mound. The Meon valley was inhabited by a British tribe which had their hill fortress on old Winchester Hill, which towers above this part of the valley, and it was therefore a well peopled area in British time. The mound at Burton, near Christchurch, is flat on the top, and there is a record of an ancient church dedicated to St. Martin, a Gaulish Saint, which stood upon it, and caused the mound to be known as St. Martin's Hill. Higher up the Avon, a somewhat similar artificial mound may be seen on which the church of Sopley stands. Another instance is that of Cheriton, which has a church on an artificial mound occupying the greater part of the present churchyard. Very near to the site of this mound, we find some of the most remarkable of the permanent springs of this branch of the Itchen, which circumstance may be an additional argument in favour of the Celtic origin of the mound, as these springs perhaps fixed the site of the mound as well as that of the village. I have elsewhere shown that the Saxons in Hampshire utilised Celtic earthworks as the defences of their early boroughs,² and I see no reason why they should not also have utilised Celtic mounds

¹ Hibbert Lectures on "The Origin and Growth of Religion," p. 204.

² Paper on "Early Boroughs in Hampshire," "*Archæological Review*," vol. iv, No. 4, November, 1889.

both for defencès and for sacred purposes. If these mounds were sacred sites of the Celts, their sacred character must have survived in Hampshire until the time of Birinus, the Christian missionary to the West Saxons in the seventh century, and we know that the early missionaries in England were instructed to adopt the sacred pagan places as sites for Christian temples, and to substitute Christian festivals for those of pagan origin.¹

Cæsar tells us that the Belgæ worshipped the sun, moon, and fire, and Tacitus says they also worshipped Hertha, or their mother earth, by which he must, I think, have meant to include springs and fountains. Close to the ancient border of Hampshire, which at one time appears to have included Amesbury, is Stonehenge, the most remarkable structure connected with the worship of the sun in Britain. I assume it is now generally allowed, that Stonehenge was intended to be symbolic of sun worship, and whether constructed by the Celts or some other race, the many tumuli which are found near it tend to prove that it was understood and revered by the Celts as a sacred place. The lines denoted by the outlying stones at Stonehenge, point to the direction of sunrise and sunset at the summer and winter solstices. In addition to these festival periods of their year, the Celts appear to have had two other seasons which they held in much reverence, viz., those at the beginning of May and the beginning of November. It is scarcely necessary for me to remind you that the May and November festivals have come down to our time from a very remote antiquity. With the ancient Celtic people, the beginning of May appears to have been the great feast of the sun,² and the beginning of November the time when they commemorated their dead ancestors.

If a line in the form of a tangent is drawn from the northern part of the outer circle of stones at Stonehenge, to the outlying stone known as the Friar's Heel, and is continued, it points to about the east north-east, the line of the May sunrise.

Whatever differences of opinion may prevail concerning the meaning of Stonehenge in relation to other objects with which it is surrounded, there can, I think, be no doubt about these lines of sunrise. It is enough for my purpose in this paper, if it is allowed that Stonehenge was revered by Celtic people and understood by them, to be symbolic of sun worship. The reverence with which it was regarded must have lasted for many generations after the introduction of Christianity, for we find that the barbarous adoration of the sun, moon, fire, fountains and trees was forbidden by special edicts, issued as

¹ Letter of Pope Gregory to Miletus the Abbot.

² Matthew Arnold on "Celtic Literature," p. 61.

late as the time of Edgar in the tenth century, and of Canute in the eleventh, and I think it very probable that its partial destruction may have taken place, under the order of one or other of these kings.

If it is allowed that Stonehenge was venerated by people of the Celtic race as an elaborate symbol of their religious sentiment concerning the sun, it cannot be thought improbable that these same people may have also intended certain other of their works, which have survived to our own day, to have had a symbolic meaning. This was, I think, the case in regard to some of the sites they selected for the tumuli, which they reared to commemorate their dead. I have enumerated more than 300 tumuli which still exist in Hampshire. Tacitus tells us that the Belgæ reared no monuments to their dead, that they adopted cremation, and sacrificed horses at funerals. If he meant that they reared no stone monuments, and did not include the simple mound of earth as a monument, the statement is confirmed by the existing remains. Horses' teeth are still found occasionally on the Celtic burial sites of Hampshire; which makes it certain that they were sacrificed, and nearly all the burial sites of the same people in this county afford evidence of cremation. In two instances, burial places containing many urns filled with cremated matter have been discovered without any tumuli to mark the places, at the time of the discovery, viz., one discovered many years ago near Ryde, and another found in 1888 at Dummer, near Basingstoke. Implements and other articles of bronze, or worked flints of some kind, are commonly found on these burial sites. The existing tumuli are of various shapes, and similar to those on Salisbury Plain and in other parts of Wiltshire, described by Sir Richard Colt Hoare. The usual mode of interment in Hampshire was by the cremation of the body and the preservation of the ashes in earthenware vessels of various sizes, which were buried with their mouths downwards, and commonly placed on rudely constructed floors of flints. In some instances, the urns containing the cremated ashes are larger vessels than the quantity of ashes required, and the mode of interment adopted in such cases was to place clay at the bottom and round the sides of the vessel, then to put in the ashes and fragments of bone, to cover the mouth of the vessel with more clay, and to place it on a floor of flints in an inverted position two or three feet below the surface of the earth. This was the mode of interment at Dummer, from which site thirteen urns were removed in 1888. Some of these vessels were so large that they appear to have been previously used for domestic purposes, perhaps used for holding corn or flour from the hand-mills or querns. One of

the largest of these vessels is in the museum of the Hartley Institution.

In three instances which have come under my notice, the remains found on or near these burial places, have included skulls or parts of skulls which show marks of violence, as if slaves were sometimes killed at these interments. The museum at Newport, in the Isle of Wight, and the museum of the Hartley Institution contain skull bones which exhibit these marks of violence.

The tumuli which remain are most abundant on the open heaths of the New Forest, and on other heaths and downs in various parts of the county. Many others have been destroyed by agricultural operations since the date of the inclosure of the downs and other common pastures.

Although cremation appears to have been the usual practice among the early inhabitants of Hampshire, some examples of the burial of the body in a sitting posture in roughly formed cists, cut out of the chalk, have been found. In one such instance in which I secured the bones for the museum of the Hartley Institution, I was careful to ascertain that the flexured body was deposited so that the face was placed as if looking towards the north-east, or east north-east.

Many of the Celtic barrows in Hampshire are on the watersheds. A good example is that at Crawley Clump, where you may stand near the tumuli there, and look north and south, and see that the site is on high ground close to the dividing line of the water drainage between two branches of the Test. Here also you may see that this site was a burial place for men who reared long barrows to commemorate their dead, as well as for those who reared round barrows, for both are found within a short distance of each other. In Hampshire, Celtic tumuli are also commonly found just above the permanent water sources, and in some instances just above the occasional water sources. These occasional water sources are those which give rise to chalk bourns, which are a marked feature in the physical geology of chalk districts. The bourn is a stream which does not always flow. Usually it is dry during the summer and autumn months, depending on the rainfall. When the line of saturation rises sufficiently high in the chalk, then the bourn spring begins to flow. If the rainfall has been only moderate in amount, the lower springs flow only, but if the rainfall has been great, the line of saturation rises, and causes the water to flow out from springs higher up the bourn, and in very wet seasons much higher up. These phenomena must have been as well known to the earliest inhabitants of the chalk valleys as to ourselves, whatever may have been their opinion on their

cause. Whether they reasoned about them or not, they must have known the facts. That these chalk bourns were in early time more generally fed by springs higher up the valleys than the present permanent springs owing to the greater area of forest land, and the consequent greater humidity is, I think, certain. The clearing of the forest land must have affected the height of the permanent springs, but there must always have been occasional water sources higher up the valleys, which would be active only in very wet seasons. Some of these occasional springs flow only once in ten, or in as many as twenty years, and in some remarkable instances the sites of these occasional springs in Hampshire were chosen by the Celts of that part of England as burial sites. This is the case at the Seven Barrows between Whitchurch and Newbury. For many years in succession you may pass through the little village of Litchfield, near these barrows, and see that the water course along the village street is quite dry, but occasionally after long intervals, it is a roaring little torrent, and its highest occasional source is close to the Seven Barrows. I cannot think that the selection of this remarkable burial site could have been accidental, and have had no reference to the occasional flow of the stream. The higher chalk area to the north of the Seven Barrows, which is the collecting area for the water that feeds these springs in very wet seasons, is of such a geological character as must have kept it an open downland in prehistoric time, as it is at the present day, for it is part of the natural open land known as the Clere district, as early as Anglo-Saxon time. If, therefore, we may conclude that the Seven Barrows were thrown up on this site, close to the occasional water sources of the bourn, by the Celts of Hampshire, with a knowledge of the peculiarity of these springs, we may reasonably inquire whether they could have had any motive for selecting such a remarkable spot. We have in Hampshire three groups of tumuli known in each case as the Seven Barrows. In addition to those I have mentioned, there is a group of Seven Barrows to be seen about two miles west of Stockbridge, and this group is near the head of one of the small lateral valleys of the drainage system of the Wallop stream, a branch of the Test. There is also a group of tumuli known as the Seven Barrows in the parish of South Tidworth, on the north-west border of the county, and not far from the great bourn stream known as the Collingbourn, one of the most remarkable mole streams in England, and into which when it is a bourn, water flows from the lateral valleys, near the head of one of which the Seven Barrows of South Tidworth are situated. With the significance of groups of tumuli, seven in number, I have no

special concern in this paper, but the number is remarkable. There is also a group of tumuli known as the Seven Barrows near Lambourn, in Berkshire. There also appears to be the remains of a group of barrows near Bramdean and Hinton Ampner in Hampshire, near to the site of a bourn spring which is one of the occasional sources of the Itchen.

In view of these several circumstances, it appears to me that the Celts of Hampshire in choosing these occasional water sources for burial sites, wished to express thereby some conviction of their own. Burial by water sources, whether permanent or occasional springs, must, I think, have been intended to have been symbolic of life. The meaning of the words "fountains of living water" and similar expressions, appear to me to have been as well understood among the Aryan nations generally, as among the Hebrews in particular, and the pagan worship of fountains and wells which survived in England in a modified form until the middle ages, if indeed it is even yet extinct, sufficiently shows how deeply rooted this reverence for water sources really was.

The springs or fountains of water near the Seven Barrows in Hampshire will certainly flow again as they did in the time of the Celts, but we cannot say when, nor exactly how they will flow, nor could they; and it appears to me that this burial place must have been selected by them to have been symbolic of a new but unknown life, and that the student of anthropology may, in this group of barrows and springs, recognize a symbol intended by these Celts to express their belief in a new life, but concerning which they knew neither its time nor its nature.

This view of the religion of the ancient Celts is partly confirmed in the address of Lucan (who wrote about A.D. 65) to the British people, left by the Roman Civil War to their own devices, in which he says, "Ye too, ye bards, who by your praises perpetuate the memory of the fallen brave, without hindrance poured forth your strain, and ye, ye Druids, now that the sword was removed, began once more your barbaric rites and weird solemnities. To you only is given knowledge and ignorance (whichever it be) of the gods and the powers of heaven. Your dwelling is in the lone heart of the forest; from you we learn that the bourn of man's ghost is not the senseless grave, nor the pale realm of the monarch below; in another world his spirit survives still; death, if your lore be true, is but the passage to enduring life."¹

Such a quotation from a contemporary writer helps to explain the reason for burial places being chosen above or near water sources, whether permanent or occasional springs. If there is

¹ Quoted by Matthew Arnold in "Celtic Literature," p. 51.

any meaning at all in these burial places near occasional springs, then the churchyard at Hambledon may have been a similar Celtic burial site. In this part of Hampshire a bourn is called a lavant, and after long intervals when a lavant rises at Hambledon, some of the springs rise from, or quite close to the churchyard itself. The church here is one of the oldest in the county, and contains undoubted Saxon work, so that this spot must have been a burial place beyond the range of history.

There can be little doubt that some of the mediæval holy wells of this county derived their character from the reverence with which they were regarded in remote ages. Some of these sacred water sources are springs, in some instances sluggish springs issuing from the tertiary formations, some are chalk springs, and some are ordinary wells, but in the dry valleys of a chalk country, many wells after long intervals, overflow and give rise to streams in very wet seasons. Some of these springs were anciently known as wishing wells, and the wishing customs connected with them must, I think, have had their origin in pagan time. Some were visited down to comparatively recent time for curative purposes, more especially for complaints of the eyes. In some instances of this kind I have ascertained that the water at the present time is more or less chalybeate.

At Itchenswell and Maplederwell, springs rise close to the churchyards, and these place-names are partly Celtic. A sluggish spring which anciently had a reputed curative property in the folklore of Hampshire, is situated close to the old church of Botley, and the stream at Holybourne, near Alton, rises from the churchyard itself.

These examples appear to me to be instances in which we can trace the survival of the Celtic reverence for water sources. This reverence for water sources, and the Celtic water-names connected with springs and streams which abound in Hampshire, are among the most enduring remains of that people. Whatever may have been the exact significance of the many syllabic words used by the Celts to denote water in some state or other, the many examples of these water names which still survive, show that the language of the people of Hampshire after the Saxon conquest could not have been suddenly changed.

Of the syllabic water-words *ax*, *ex*, *ox*, we have examples at Axford, Exbury, Droxford, Oxenbourn, Oxney, Oxlease, and other places.

Of the water-syllables *an* and *en*, we have examples in the names, Andover, Andwell, Ampfield (anciently Anfield), Anmore, Enham, Hinton (anciently Henton, and still so pronounced), and Hantune, one of the ancient names of Southampton.

Of the water-word *dover* or *dufr*, we have examples in the names Andover, Candover, Micheldever, and others.

Another group of water-names are those recorded in Doomsday Book, *esse*, or words compounded of *esse*, and now in some instances pronounced ash, in others hus, or hurst. Nearly all the principal streams in this county have some place-names near their springs into which the word now pronounced ash enters, and which probably is derived from the Celtic water-word *ache*.

The sites of some of our prehistoric lakes or meres are denoted by the existence of the syllabic water-names *lin* or *lun*, as Lindford, Linwood, Lyndhurst, and London. We have about twelve insignificant places in Hampshire which still retain the Celtic name, London, and the surroundings of some of these still show traces of fortified positions near water.

The Celtic marsh word survives in the names of Romsey and Rumbidge, whose surroundings bear out their ancient names.

The names of the chief rivers of Hampshire are those which have come down to us from Celtic time, Itchen, anciently Icenan, Test, anciently Terstan, Avon, Loddon, and Wey. We have two Avons, two Loddons, two Weys, two Yars, one Oure, and one Stour.

Our place and district names which have come down from Celtic sources are numerous.

We can still find in Hampshire traces of the mythology of the Celts, and traces of their mythological heroes. Close to the northern border of the county is Ludgershall, which has a Lammas fair corresponding to the Lugnassad fairs at Lammas time held in Ireland, and which Professor Rhys has shown¹ had their origin in the early assemblies at this time of the year in honour of Lug, or the Sun. In the Summerhaugh revels which were held at St. Mary Bourn down to a comparatively late period, on or about old Midsummer day, we have a record of a late survival of the pagan midsummer festival. In the folk lore which has scarcely yet quite disappeared, about herbs under the sun, and herbs under the moon, we may perhaps see the last traces of the worship of celestial bodies, and perhaps in the personified form of Apollo and Diana. Of Puck or Pooka, the Celtic evil fairy, Hampshire retains many surviving traces in the place-names Puck pits, Pook-lane, Puck, Pokesdown, Pucks Hill, Puckaster, Puckhouse and others, and also in the names Puck-needle, and Pixies. Of the Celtic hero, Ambrosius, or Emrys, we have many traditions, and the place-names Amesbury, Ambrose Hole, Emery Down, and Emer, appear to have been derived from him. The

¹ Hibbert Lectures on "The Origin and Growth of Religion," pp. 411-2.

traditions of Merlin and Arthur survive at Winchester, where a mediæval round table hangs in the County Hall.

The blending of races which must have taken place in Hampshire appears to have been the cause of many of the Celtic survivals in that county, for certain parts of the religion, mythology, customs, communal organization, and part of the language of the Celts, appear to have become mixed with and engrafted upon the religion, mythology, customs, communal organization, and language of the Saxons. In no other way can I account for much that was characteristic of the Celts surviving until the present day, or for many Celtic customs lingering until the middle ages. I have already alluded to the May-day sunrise and the Stonehenge lines. This May-day sunrise was certainly revered in mediæval Christian time as well as in pagan Celtic time, for the line of about 20° north of east is the line of orientation of a large number of the oldest churches in Hampshire, and of many in other counties. It is a common orientation among the oldest churches of Hampshire, in which county there are as many as seventy examples of it. I cannot explain this on any other ground than the survival of a reverence for the May sunrise from Celtic pagan time, to Saxon Christian time, and under a modification to a later date. It appears to me that as there is evidence of the survival of part of the Celtic people, it is not surprising to find that traces of their May-day customs have survived also.

It is of course possible that in this common line of orientation of many old churches, we may see all that remains of one of the customs of the old British Christianity which existed before the coming of the Saxons.

I have already mentioned, that we find two different kinds of burial were adopted by the early inhabitants of Hampshire, a circumstance pointing to different races of people. Also, we certainly have traces of two branches of the Celtic race, for a considerable number of Gaelic words survive among the place names of Hampshire, as well as a large number apparently of Cymric origin. Such Gaelic names as *ow*, a river; *eannagh*, a marsh; *knock*, a hill; *loch*, a pool or lake; *larrock*, a house site; and others are found in Hampshire, and are common in Ireland. We have one place name, Dublin, which means a black pool, near a marshy part of the Test, and which place in Celtic time probably had this character.

The traditions of Merlin and especially those connected with the origin of Stonehenge, are much the same as the Irish legends and traditions of Kildare, and of Stonehenge having been removed from Kildare. The Irish historical traditions concerning the Belgæ and their invasion of part of Ireland are well known, and

point to some connexion between these Belgæ and the Irish Gaels. The similarity in the traditions of a later age are curious.

The legend of St. Patrick and the snakes, finds its parallel in a similar legend of St. Birinus, the missionary to the West Saxons, and there is a tradition of the earliest abbess of Romsey being an Irish nun named Merwenna, a disciple of St. Patrick.

Such names as Iernesburgh near Lymington, and Clonmanron as a Celtic name for Christchurch, and by which it was known to early foreign traders, are Irish names rather than Cymric.

In the Irish raths we find a parallel to the Celtic castles of refuge which still remain in Hampshire, the earthworks of the Belgæ, spoken of in the Triads as the "refuge-taking men of Galedin."

The seven old churches in a group at Clonmacnois in Ireland find their parallel in the traditionary accounts of similar groups of churches formerly existing at Christ Church and Winchester.

The late Dr. Guest expressed his opinion that the Belgic dialect belongs to the Gaelic rather than the Cymric branch of the Celts.

As we find among the characteristic survivals of the Celts in Hampshire, so many traces of the Gaelic branch of that race, this appears to me to indicate that there must have been either in succession or contemporaneously both Cymric and Gaelic tribes in that part of England.

DISCUSSION.

Mr. T. V. HOLMES remarked that on the last occasion Mr. Shore had discussed the ancient camps of Hampshire. On this he had treated, among other matters, of the large mounds which were not barrows, but had evidently been intended for other purposes. It seemed to him that Mr. Shore's suggestion that they had been made to serve some religious use was a very probable explanation. For while a camp was evidently well-suited to be a refuge to the women and children, the flocks and herds of an invaded tribe, a mound even as large as Silbury, or as those on which so many mediæval keeps had been erected in East Anglia, could hardly have been useful in that way. Besides, many of these mounds, as Mr. Shore had shown, were on low ground, like Silbury. That huge mound was in the valley of the Kennet, close to the river, and considering the sanctity attached to places at which bournes occasionally appeared, it seemed probable that Silbury, with other mounds similarly situated, were raised at spots thought peculiarly favourable for invoking the deity of the stream.

Mr. A. L. LEWIS said the point brought forward by the author about the May-day sunrise was certainly new to him, and if Stonehenge were the only instance, he would regard it as an accidental coinci-

dence, because there was nothing on the north side of Stonehenge to mark any definite point of observation; but, according to details supplied to him by Admiral Tremlett, the allignments of Menec in Brittany ran in a direction 30° north of east from an incomplete circle, and those of Kerlescan 26° north of east from the open side of an enclosure which formed three sides of a square, and these were very near the bearing spoken of by Mr. Shore. May-day had always been observed in Brittany in old times, and the chant called *Les Seriés*, which was regarded as a genuine relic of Druidic poetry, contained the following line:—"Eight fires, with the great fire lit in the month of May;" so that they had from Brittany a very strong confirmation of Mr. Shore's views. There was a small circle in very much the same direction from the Long Meg circle in Cumberland, and it was very likely that in many cases prominent hill-tops might be found in the line of May-day sunrise from circles. This was a point to which he would give particular attention in any future visits to circles, and he was obliged to Mr. Shore for bringing it before the Institute.

DR. SHORE, MR. ATKINSON, MR. PARK HARRISON, MR. GREATHED, and DR. GARSON also joined in the Discussion.

MR. SHORE, in reply to Mr. Holmes, said there were in Hampshire some mounds which were old moot or court places such as that at Cuthorn on Southampton Common, and others still existed, which were Saxon burh mounds. These he thought were probably used by the Saxons for defensive purposes by timber structures, as surmised by Mr. Clarke and other writers on ancient military architecture. There is in Hampshire a place which at the time of the Domesday Survey was known as Timbreberie.

In answer to Mr. Atkinson the author said that the finding of British burial urns without any barrow, might have been due to these having been placed originally in a disc barrow or ring barrow, i.e., a burial place marked by a circular ditch and bank only, of which some few still existed in Hampshire. These would be most liable to destruction after the inclosures, and many of them must have been obliterated by the plough. The charcoal-burners' huts in the New Forest were of the circular form, and built largely of turf, wood, and fern.

Replying to Mr. Park Harrison he said that most of the tumuli in Hampshire were round barrows, but he had seen about a dozen long barrows in that county.

In reply to the Chairman he said that all the crania found in Hampshire, so far as he knew, were those of brachycephalic people. The skull of the flexured skeleton found in a chalk cist at Wherwell is brachycephalic. In regard to the general question of who the Celts were, and whether they were the earliest people of Hampshire, the author said there were traces of an earlier race, viz., these people who buried their dead in a sitting posture, and that these were perhaps Iberians; but very few of these burials had been found in Hampshire. He only knew of three. There was also the theory

raised by Mr. Elton and other writers, as to a Finnish or Mongol immigration, among which race the custom of inheritance by the youngest son could be traced to a remote antiquity. In Hampshire this custom formerly prevailed on nine manors.

DR. GARSON and MR. LAWRENCE exhibited certain human skulls from the bed of the Thames, and made the following remarks:—

REMARKS on SKULLS dredged from the THAMES in the neighbourhood of KEW.

By J. G. GARSON, M.D., V.P.A.I., and Lecturer on Comparative Anatomy, Charing Cross Hospital.

THE skulls which I have the pleasure of calling your attention to to-night were placed at my disposal for this purpose by Mr. G. F. Lawrence, who will make some remarks regarding the geological stratum in which they were found (see p. 26).

There are in all fifteen specimens on the table before us; some of these are almost complete, while others are unfortunately only fragmentary. Eight of them, those marked B, C, F, I, K, N, O, and P, were found near Kew; three marked D, L, and M were obtained between Kew and Mortlake; two marked A and H came from the river bed near Hammersmith; while the remaining two, E and G, were dredged at Twickenham and in Lion Reach respectively. All of the specimens therefore were obtained within a distance of a few miles. On separating the obviously male specimens from those which are distinctly female, and running the eye along each group, we see that there is a good deal of difference between some of the male skulls, but less variety occurs in the females. Among the male skulls there are at least two well-marked types, which may be readily distinguished by almost anyone. There is first a type in which the skull is low in height, broad (especially in the frontal region), and the vault as seen from the front has a low broad arch. When we look at these skulls from above it will be seen that they are squarish-oval in form. Their cephalic index is about 75.0. Of this type there are five specimens, namely, those marked respectively D, L, M, H, and P. In some of these the glabella and superciliary ridges are fairly marked, while in others these prominences are less distinct. The forehead is receding. One of the specimens, marked P, is metopic. The three Mortlake specimens, one of the Kew, and one of the Hammersmith specimens are of this type. The second type differs from that just described in the cranial

vault being acutely arched from side to side, the brain cavity being long and narrow, and the cephalic index averaging about 70·0. In one (marked F) the glabella, but more particularly the superciliary ridges, are excessively developed, while in the others these parts are moderately marked. Most of these specimens have irregularities of the surface, and in this respect differ from the previous type, which are remarkably smooth and regular. Of this second type there are four examples, namely, two of the specimens found at Kew, and the Twickenham and the Lion Reach specimens; these are marked respectively F, N, G, and E. Possibly a third type intermediate in character, between the former two, is represented by the cranium marked O, obtained from Kew. It is a very fine example of a well-filled and formed skull of large size, rather more dolichocephalic than the average English skull of the present day, the cephalic index being 74·2. The superciliary ridges and glabella are fairly developed but not markedly so; the greatest elevation of the former is over the inner angle of the orbit. This specimen is very nearly allied to those of the second type, and had the means of determining more completely the facial characters of the latter been present, might have been included with them, with a remark that one of the specimens is a little more brachycephalic than the others. In none of the latter have we got the facial portion preserved, and consequently we have to trust to the shape of the calvaria alone in classifying them.

Of the other specimens those marked B, D and I respectively, are females; the specimen marked K is also probably of female sex, but being very incomplete the sex cannot be determined with certainty. The specimens B and G are complete crania, and resemble one another in general appearance; their measurements also are very similar; but B has somewhat more masculine characters than I, the surfaces for the attachment of muscles being more marked on it. The cephalic index of these two crania averages 75·2. In relation to the male specimens the female crania correspond to the first type; the specimen K is, markedly of this type, being flatter than the other females. It differs from all the other specimens in having the outlines of its lateral walls, when viewed from above, remarkably straight and diverging till the greatest breadth is attained at the posterior part of the parietal bones—in other words, it is markedly “coffin-shaped.” All the female specimens, it will be noted, were obtained from the river at Kew.

The following notes regarding the character of each individual specimen, and the table of measurements appended, may be useful for the purpose of comparing these with other specimens of ancient British skulls:—

First Type.

- D, L, M and H. Broad flat calvaria, more or less imperfect, of oval form, superciliary arches distinct from glabella and feebly developed. These specimens are very similar in appearance, and are fully adult. The first three found at Mortlake, the last at Hammersmith.
- P. Similar to the previous four specimens, but more dolichocephalic. Metopic; square and broad in frontal region; the arch of the cranial vault low and broad, the occipital region pointed. Found at Kew.

Second Type.

- F. Calvaria of an adult male somewhat imperfect, the base being absent. The superciliary ridges and glabella are extraordinarily prominent, the former extending along the whole orbital margin to the external orbital processes. The external occipital protuberance and superior semi-circular line are also very strongly developed. The sagittal suture is situated in a depression extending from before backwards. The form of the cranium is long and narrow; cranial vault acutely arched from side to side. Obtained from the river at Kew.
- N. Calvaria of adult male. Very dolichocephalic, supra-orbital ridges entirely absent; forehead prominent; the arch of cranial vault acute but sunk at the apex, and in the depression, which extends from before backwards, is situated the sagittal suture. The occipital ridges are feebly marked; the surface generally is uneven. Obtained from the river at Kew.
- G. Calvaria of adult male. Resembles very closely the specimen marked N. Dredged in Lion Reach.
- E. Calvaria of adult male. Forehead moderately prominent; the arch of the cranial vault acute; no depression at the apex as in F, N and G, so that the sagittal suture runs along the highest part of the vault: in other respects resembles the two previous specimens. Dredged at Twickenham.

Other Specimens.

- O. Cranium of adult male. Glabella and superciliary ridges moderately developed, and form a continuous elevation in the centre of the brow region; forehead rather receding, muscular ridges moderately developed.

In all respects a well-formed cranium; the upper part of the face moderately prominent; nose straight; axes of orbits at a medium angle.

- B. Cranium of adult female. Superciliary ridges and glabella moderately developed; forehead square and broad; metopic; cranial arch broad from side to side; the ridges for muscular insertions fairly marked. Teeth moderate in size; not much worn. From the river at Kew.
- I. Cranium of adult female. The muscular ridges feebly developed; frontal region not so broad as in the previous specimen, and the face is shorter from above downwards. From the river at Kew.
- C. Imperfect calvaria. From the river at Kew.
- K. Imperfect calvaria of remarkable shape, very broad in posterior parietal region, narrow in front, with absolutely straight lateral walls, which diverge regularly from the frontal region to the parietal bosses; afterwards they converge rapidly. Occipital region and base wanting. Surface smooth, ridges for muscular insertions absent. The arch of the cranial vault is remarkably flat and broad. Probably female. From the river at Kew.
- A. Imperfect calvaria of young person. Oval in shape, pointed at frontal and occipital ends. From the river at Hammersmith.

It is difficult to determine with any degree of certainty the period to which these specimens belonged, on account of their being dredged up from a river bed. The evidence which must guide us in coming to a conclusion as to the approximate date at which their owners inhabited the country is of a threefold nature. There is first the evidence afforded by the character of the specimens compared with those of known date; next that indicated by the objects of art or manufacture found or dredged up with them: and thirdly, the evidence to be derived from the geological stratum in which they lay. The characters of the specimens can only be imperfectly studied on account of the broken and imperfect condition of most of them, but the form of the calvaria would indicate that they are those of the dolichocephalic race or races whose remains are found in various parts of the country, associated in earliest times with neolithic implements, and who appear to have been the inhabitants of this country anterior to the advent of the brachycephalic or Celtic race usually associated with the Bronze period. The investigations which have been hitherto made regarding the osteological characters of this dolichocephalic or neolithic people, seem to show that they were not a homogeneous race, but

	MALES.						FEMALES.						Young.	
	D.	L.	M.	P.	F.	N.	G.	E.	O.	B.	I.	C.	K.	A.
Maximum length	184	192	c 194	200	187	189	192	183	190	180	175	130	144	137
Maximum breadth	c 146	144	146	144	133	130	136	130	141	134	133	130	144	137
Cephalic Index	c 79.3	75.0	c 75.3	72.0	71.1	68.8	70.8	71.0	74.2	74.4	76.0	88	..	130
Minimum frontal breadth	100	99	..	..	..	93	96	91	96	98	90	88	..	130
Height	134	132	133	130	131	..	..	130
Height Length Index	69.8	72.1	70.0	72.2	74.9	..	..	130
Basio-nasal length	96	100	104	100	94	..	..	130
Basio-alveolar length	102	98	88	..	..	130
Gnathic Index	98.1	98.0	93.6	..	..	130
Nasio-alveolar length	78	67	56	..	..	130
Nasal height	57	47	43	..	..	130
Nasal breadth	26	23	23	..	..	130
Nasal Index	45.6	48.9	53.5	..	..	130
Orbital height	34	31	30	..	..	130
Orbital breadth	39	36	36	..	..	130
Orbital Index	87.2	86.1	83.3	..	..	130
Palato-maxillary length	59	53	49	..	..	130
Palato-maxillary breadth	65	59	58	..	..	130
(min. bi-maxillary breadth)	90.8	89.8	84.5	..	..	130
Palato-maxillary Index	92	85	85	..	..	130
Maximum bi maxillary breadth	168.0	185.0	214.0	..	..	130
Bi-zygomatic breadth	131	124	120	..	..	130
Mid-facial Index =	130
Bi-zygomatic breadth × 100,	130
Nasio-alveolar length.	130

c = circum.

consisted of more than one race. The two distinct types found among these specimens is therefore an interesting circumstance, and may prove very important in connection with future observations. Although belonging to the earliest known inhabitants of this country, it does not follow as a matter of consequence that these specimens belong to the neolithic age. We find that the neolithic races lived during the Bronze period as well as before it, and even during Roman times, but their distribution during later times was more restricted or beyond the boundaries occupied by the new-comers, as is usually the case with a conquered race. The absence of brachycephalic skulls amongst the specimens before us as well as the fact that they were found in the district which would be first occupied by the brachycephalic race coming in from the east or south-east, would indicate that probably they belong to an age anterior to the invasion of the country by the Bronze age or Celtic people.

The implements which have been found in the same stratum as that from which these specimens were obtained, I understand from Mr. Lawrence, are of stone, bone, and bronze, but no implements were found with the specimens.

The geological stratum in which the specimens were obtained will be described by Mr. Lawrence, who will tell you they were found in the stratum immediately above the London clay. Further information regarding the geological formation of the Thames valley which throws light on this subject, is contained in a valuable paper by Mr. F. C. J. Spurrell, F.G.S., in the "Proceedings of the Geologists' Association," Vol. xi, No. 4. An important point bearing upon the antiquity of the specimens before us is the fact that between the stratum in which they were found and some of the strata above it, are hard concretionary crusts, which required some force to break through, thus eliminating all possibility of the specimens having reached their resting-place by subsidence at a subsequent period during the formation of the more recent strata.

As considerable interest attaches to these skulls from the bed of the Thames, I am glad to be able to announce that Mr. Lawrence has consented to present them to the Natural History Museum at South Kensington, where they will be preserved for future reference and study.

REMARKS *on the GEOLOGICAL POSITION of the SKULLS
dredged from the THAMES.*

By G. F. LAWRENCE, M.A.I.

ALL the skulls exhibited here this evening, and described by Dr. Garson (p. 20), have been dredged up at various times from the bed of the River Thames. I have endeavoured to ascertain the exact geological stratum from which they were obtained, but this was rather difficult, as the beds are naturally under water; and I have been able to ascertain only their general character.

At the spot at Hammersmith, where I obtained the two skulls marked A and H, the section of the river bed is as follows:—

8 to 9 feet.—Gravel with small mussel and other river shells. (No. 1.)

3 to 4 inches.—Hard concretion. (No. 2.)

8 inches.—Sandy gravel with occasional pieces of decayed wood and numbers of large mussel shells. (No. 3.)

River bottom of London clay.

The two skulls, A and H, were found in stratum No. 3.

The skulls marked D, L, and M, were found between Mortlake and Kew. The bed here is the same as that last mentioned in the general order of the strata, but the thickness of the various beds is different.

1½ to 2 feet.—Gravel. (No. 1.)

3 inches.—Hard concretionary crust. (No. 2.)

8 feet.—Sand passing into gravel, getting coarser towards the bottom, and covered with calcareous concretions. (No. 3.)

London Clay.

The skulls marked D, L, and M came from stratum No. 3.

The remaining skulls, with the exception of E and G, were found nearer Kew.

Here the strata are different, and are as follows:—

18 inches.—Gravel. (No 1.)

3 inches.—Concretionary crust. (No. 2.)

6 inches.—Gravel. (No. 3.)

2 to 3 inches.—Concretionary crust. (No. 4.)

4 to 6 feet.—Coarse black gravel, encrusted with carbonate of lime. (No. 5.)

The skulls before mentioned came from No. 5, were intensely black, and most of them had a quantity of the calcareous incrustation upon them when found.

The skull marked G was found in Lion Reach, and that marked E at Twickenham; but I have been unable, as yet, to get reliable information as to the strata there.

It will be seen that the skulls I can trace have all come from the lowest layer of the river bed, that lying upon the London clay; but I leave it to more experienced geologists to say what the antiquity of the skulls may be, merely adding that implements of stone, bone, and bronze have been found in this stratum, years ago, while antiquities of iron seem only to occur in the higher strata.

FEBRUARY 25TH, 1890.

EDWARD B. TYLOR, Esq., D.C.L., F.R.S., *Vice-President, in the Chair.*

The election of the Hon. J. W. POWELL, Director of the Bureau of Ethnology, Washington, U.S.A., as an Honorary Member, was announced.

The following presents were announced, and thanks voted to the respective donors:—

FOR THE LIBRARY.

From the GOVERNMENT OF NEW SOUTH WALES.—Annual Report of the Department of Mines, for the year 1888.

From BARON A. VON HÜGEL.—The Nanga of Viti-Levu. By Mr. Adolph B. Joske, Fiji. With Note by Baron Anatole von Hügel.

From the ROYAL COLLEGE OF PHYSICIANS, EDINBURGH.—Laboratory Reports. Vol. ii.

From the DEUTSCHE GESELLSCHAFT FÜR ANTHROPOLOGIE, ETHNOLOGIE UND URGESCHICHTE.—Correspondenz-Blatt, 1889, Nr. 11 u. 12; 1890, Nr. 1.

From the BATAVIAASCH GENOOTSCHAP VAN KUNSTEN EN WETENSCHAPPEN.—Tijdschrift voor Indische Taal-, Land- en Volkenkunde. Deel xxxiii. Aflevering 3 en 4.

—Notulen van de Algemeene en Bestuurs-Vergaderingen. Deel xxvii. Aflevering 3.

—Nederlandsch-Indisch Plakaatboek, 1602-1811. Door Mr. J. A. Van Der Chijs. Deel vi. 1750-1754.

- From the AUTHOR.—Report on the Prehistoric Remains from the Sand-Hills of the Coast of Ireland. Report on Flint Implements of the North-East of Ireland. By W. J. Knowles.
- From the ACADEMY.—Bulletin International de l'Académie des Sciences de Cracovie, 1890. Nr. 1.
- Boletín de la Academia Nacional de Ciencias en Córdoba. Tomo x. Entrega 3a.
- From the INSTITUTION.—Journal of the Royal United Service Institution. Vol. xxxiv. No. 151.
- From the SOCIETY.—Journal of the Society of Arts. Vol. xxxviii. Nos. 1943, 1944.
- Proceedings of the Society of Biblical Archæology. Vol. xii. Part 3.
- Bulletins de la Société d'Anthropologie de Paris, 1889. Fas. 3.
- Bulletin de la Société d'Anthropologie de Lyon. Tom. viii. Nos. 1, 2.
- Bulletin de la Société de Borda, Dax., 1889. Fas. 4.
- Nouveaux Mémoires de la Société Impériale des Naturalistes de Moscou. Tom. xv. Livraison 6.
- From the EDITOR.—The American Antiquarian. Vol. xii. No. 1.
- Timehri. Vol. iii. Part 2.
- Nature. Nos. 1059, 1060.
- Science. Nos. 365, 367.
- Revue Scientifique. Tom. xlv. Nos. 7, 8.

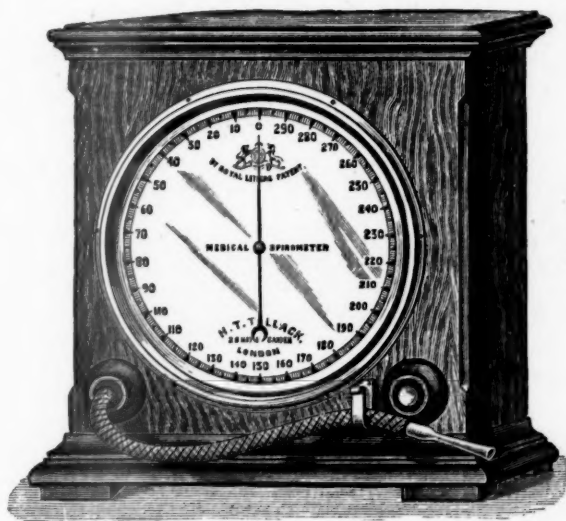
NOTE on a NEW SPIROMETER.

By W. F. STANLEY, F.G.S., M.A.I.

Dr. GARSON exhibited and described *Stanley's Spirometer*, and the following remarks were then made by Mr. Stanley:—

The spirometer exhibited was designed to register the number of cubic inches of air a person could expire at the resistance of a small constant pressure, the resistance in the instrument before the meeting being equal to 2 inches of water pressure only. In the ordinary spirometer in use, formed of a counterbalanced receiver placed in a pneumatic trough, it is well known that according to the counterbalancing and difference of height of water in the receiver the resistance pressure may vary from about - 3 inches to + 3 inches of water. In the first case, air may be drawn in during expiration from the nose. In the second, the muscular power of the lungs will be enabled to expel nearly their

entire contents. In another form of spirometer in which the expelled air moves light fans in air, it is found to be impossible from the unequal friction caused by corrosion and from leakage, to maintain nearly equal rates. The instrument before the meeting is constructed upon a principle common to the best forms of gas meters, but in this case the measurements being for small quantities, and needing no apparatus for continuous additions for registration, nor solidity of parts for rough handling, the measuring apparatus is made much lighter and of more delicate construction. It consists, as in the gas meter, of a light closed fan wheel, with cup fans, revolving nearly under water. The expelled air is projected into one side of the fan wheel. This side rises immediately by the minus gravity of the air to that of the surrounding water, and the air escapes at the surface, while in the meantime another fan comes to position to receive the next quantity of expired air, and so on continuously so long as the lungs expire breath at a pressure beyond the small frictional resistance of the apparatus.



The registration mechanism consists of a light train of three watch wheels and a single balanced hand, which indicates the number of cubic inches on a dial. The hand stops and remains at its final position when the expired air has no longer power to move the mechanism. The registration shows upon average about 10 per cent. more than that given in Dr. Hutchinson's

tables, which were taken from the register of an ordinary pneumatic trough spirometer.

The hand is brought back to zero for another operation by pressing a button, which is connected with simple mechanism adapted to this end.

Mr. TALLACK, the maker of the instrument, also explained its construction.

The CHAIRMAN read a paper by Mr. Skertchley "On Borneo Traps," which will be printed, with illustrations, in the next number of the "Journal of the Anthropological Institute." He then gave a verbal abstract of the following communication:—

The DIERI and other kindred Tribes of CENTRAL AUSTRALIA.

By A. W. HOWITT, F.G.S.,

Corr. Memb. Anth. Inst. of Great Britain.

[WITH PLATE I.]

§ 1. *Introduction.*

IN the course of my enquiries during more than the last decade into the tribal and social organization and the beliefs and customs of the Australian savages, I soon found that some of the most important facts were to be met with in the tribes of Central Australia. With some of these I had had more or less personal acquaintance before their country was occupied by the white settlers. One of these tribes was the Diēri,¹ and it happened that there were special opportunities for obtaining authentic information concerning it. Mr. S. Gason, whose pamphlet on "the Dieyerie Tribe" is well known, would, I felt certain, be able to give most important details. The Lutheran Missionaries had been for some time settled in the heart of the Dieri country, and there were settlers here and there in that part of Central Australia on whose information I felt that I might count. In compiling the facts I thus gathered I found my own knowledge of the Dieri and kindred tribes of the greatest value, as it enabled me not only to check the statements of my correspondents, but

¹ I find it impossible to write this word so as to give its peculiar pronunciation by the aborigines. The "e" has a long drawn sound, which is imitated by the letter "y" in the word as spelled by Mr. Gason.

also to indicate lines of inquiry which had not presented themselves to them.

Some of the information which Mr. Gason has kindly favoured me with was evidently taken from his pamphlet on the "Dieyerie Tribe." These statements of his have this special value, that they have been fully confirmed during the years which have elapsed since he first published them. Therefore I have let them stand as they form a connected part of my own, but I have bracketed them for the information of the reader.

My best thanks are due in the first place to Mr. S. Gason for the unwearied attention which he gave to my numerous enquiries. Then to the Revs. H. Vogelsang, C. A. Meyer, and J. Flierl, of the Lutheran Mission to the Dieri; to Mr. W. J. O'Donnell, formerly of Mount Howitt Station, and to Mr. Robert Hogarth, formerly of Strangways Springs, who have rendered me every assistance in procuring the necessary information as to the tribes referred to.

§ 2. *The Geographical Range of the Tribes.*

The tribes herein considered occupy a tract of country in Central Australia which is not less than 300 miles north and south by 300 miles east and west—that is to say, the whole of that country is occupied by tribes which either recognize a relationship to each other in stock, which is exhibited in their language and in custom, or where that relationship is not acknowledged or has not been ascertained by my informants, it may yet be inferred from the community of custom.

One tribe only, namely, the Kunandaburi tribe of the Barcoo River, within the Queensland boundary, is separated by some hundred miles from the most easterly one of the group of tribes spoken of.¹ Yet the customs of this tribe show clearly the same striking features which exhibit themselves in the others, and it becomes evident that the range of custom must be extended so as to include the Kunandaburi. How far to the westward, southward and northward the peculiar social customs extend of which those of the Dieri may serve as the type I cannot say, and it must be left for future investigation, perhaps even for future investigators, to determine. For the present it must suffice to say that the social organization which is described in this memoir

¹ I am under great obligations to the Surveyor-General of Queensland for most courteously favouring me with a map showing the position of the Mount Howitt Station, which is situated in the Kunandaburi country, and also for the information that its position is at lat. 26° 32' 30" S, and long. 142° 14' 0" E.

extends at least over an area of 500 miles diameter in Central Australia and embraces at least a dozen tribes.¹

The accompanying map (Plate I) shows by boundaries which are only approximate the range of the several tribes. Of these the Dieri is the largest and the most important, occupying country in the delta of the Barcoo River on the east side of Lake Eyre. The range of the Dieri tribe as given upon the map is, according to the data furnished by Mr. Gason, who has also marked out the approximate boundaries of the other tribes with the exception of those of the Yandairunga, for which I am indebted to Mr. Hogarth.

These do not pretend to extreme accuracy, but they will serve the purpose intended, namely, to aid the reader by giving a "local habitation and a name" to descriptions of a geographical character which would otherwise be little better than mere words. It is possible, nay more than probable, that the boundaries do not give the full extent of the territory claimed by some of these tribes. As an instance I take the Yantruwunta. I found a small outlying horde of this tribe on the western side of the Grey Range, and learned from them that their country extended down southwards as far as Flood's Creek.²

Mr. Gason has pointed out to me that the languages of all the tribes surrounding the Dieri have similarities to that tongue, and that the names of waters and of prominent land marks are Dieri in part of the word at least. I remember noticing that the

¹ Mr. S. Gason gives me the following particulars as to the names of these tribes. I have not been able to test their accuracy:—

Awmani, from the word *Awmana* = to sit down, to reside.

Yerawaka, from the word *Yera* = this side, the nearest side, i.e., of the river.

Yantruwunta, from the words *Yantrauta* = about this time, and *wüntha* = travelling; thus meaning "about this time they were travelling."

Wongkürapüna, from *Wongka* = to sing, *ura* = to hear, and *puna* or *pina* = great; meaning, "the great song was heard."

Urapüna, from *Ura* = to hear, and *puna* or *pina* = great; meaning, "heard distinctly."

Ongkongürü, from the words *Wongka* = to sing, and *ürü* = always. Meaning, "perpetually singing." The word "*ürü*" by itself means "leg," but when used as the termination of a word, it has the above meaning.

Mürdula, from *Murda* = a stone, and *la* = of, or belonging to. This refers to the stony character of their country.

² This branch of the Yantruwunta would there, and indeed along the north and south extent of the Grey Range, come in contact with tribes which belonged to a totally different "nation," to use the collective expression which I have adopted elsewhere. The class names, *Materi* and *Kararu*, would meet with and be the equivalents of the class names, *Kilpara* and *Mukwara*. The languages also differ so much as to be a source of ridicule with the Yantruwunta, whom I have heard say, speaking of the tribes on the east side of the Grey Range, "They are foolish people, they call a *snake-fire*." The word "*turo*" in Yantruwunta means "fire"; in the language of their neighbours it means "carpet snake."

natives about Mount Serle in South Australia and I could to some extent understood each other by means of the Yantruwunta language which I used. The range of the two class names Kararu and Materi also points to a very wide extent of country covered by kindred tribes.

The tribes as shown on the map are as follows :—

1. *The Dieri*, which occupies a tract of country on the eastern and south-eastern sides of Lake Eyre. These people boast of their superiority over their neighbours, frequently speaking of them as their children and of themselves as the fathers of all tribes. The surrounding tribes also acknowledge the superiority of the Dieri, and I can confirm this statement of Mr. Gason by my own observation, that two tribes with which I had considerable communication during my explorations, namely, the Yantruwunta and the Yerawanka, always spoke of the Dieri with respectful dread. Mr. Gason says that during his journeys into the country of the surrounding tribes he was frequently asked what the Dieri were doing, and whether they were forming any Pinya,¹ while the Dieri did not exhibit this curiosity on his return to them; only enquiring from him as to the state of the country, the rainfall, and such matters.

2. *The Awmani* lived on the north-east side of Lake Eyre.

3. *The Yerawaka* lived on Cooper's Creek and to the north of the Dieri.

4. *The Yantruwunta* (Yandrawontha as written by Mr. Gason) lived on Cooper's Creek and from some distance to the east of the Queensland boundary down to the Dieri boundary. It was this tribe with which John King, the survivor of the Burke and Wills Expedition, was found by the party under my command, and with one of its hordes, namely, that at Káliūmarū, with which I had constant friendly relations for some nine months that I maintained my depôt there.

5. *The Wonkūrapūna* lived between the Diamantina River and Cooper's Creek, and to the north of the Yerawaka.

6. *The Urapūna* lived to the northward of the Awmani and next to them to the west were—

7. *The Ong Kongūrū*, who occupied the country to the north-west of Lake Eyre on the Neale and Frew Rivers.

8. *The Mūrdūla* occupied the country to the south of the Dieri, being spoken of by the settlers as the hill tribe, from inhabiting the high mountains which end near to Blanche-water.

9. *The Kūyani* lived south of the Mūrdula.

10. *The Yandairunga* occupied the country extending from the western shores of Lake Eyre for about 140 miles, and in a

¹ See § 7.

north and south direction for the same distance south of the Peak.

11. *The Kūnandebūri* tribe occupied about one hundred square miles of country at Mount Howitt on the eastern side of Cooper's Creek, being some hundred miles eastward of the Yantruwunta tribe.

Mr. O'Donnell derives this name from Kūnan="excrement"; but it seems to me that it is far more probable that the name may be Kornandaburi, from Korna=a man, and buri=of or belonging to. This would then be strictly analogous to other tribal names, as, for instance, Narinyeri, from Korna=a man, and inyeri = of or belonging to; or even to the tribal name of the Gippsland blacks, namely, Kurnai = men.

I have observed that in the tribes of which the Dieri is the centre the general name, for man, *i.e.*, black man, was Kurna or Korna, and I have elsewhere suggested that it might be used to designate all this group of tribes as the Kurna nation.

§ 3. *Organization of the Tribes.*

In a former communication to the Institute¹ attention was drawn to the existence of two co-existing organizations in Australian tribes. The reader may be referred to those memoirs, but it will be well now to briefly state the main points in order to keep these important features of an Australian community in view either as a tribe distributed over a certain geographical area, or as a community organized in accordance with certain definite social laws. In the former aspect it will be found to occupy as a whole a certain definite tract of country to the exclusion of other tribes.² As an entity it is divided into a number of lesser groups, each of which has a name and occupies a definite part of the tribal country. These are again divided and subdivided until we reach the smallest group consisting of a few families, or even only a single family, which claims also a definite part of the tribal country as its inherited food ground. These groups have a local perpetuation through the sons, who inherit the hunting grounds of their fathers. This is the local organization of the tribe. The tribe in its social aspect as a community may be taken as the entity of people who recognize a common bond of descent. The community is divided into two or some multiple of two intermarrying exogamous groups to which the

¹ "From Mother-right to Father-right," *Journ. Anthropol. Inst.*, August, 1882, vol. xii, p. 30. "On the Deme and the Horde," *Journ. Anthropol. Inst.*, November, 1884, vol. xiv, p. 142.

² It is a great offence for one native to cross into the country of another tribe without permission.

name, perhaps not the best that could have been taken, of class divisions has been applied.

Each class division has a representative group of totems. These divisions of the community are not in the Australian tribes, excepting in very exceptional cases, aggregated into localities. They then become "local clans" with descent counted through the male line.¹ With such communities I have no concern in this paper.

The two organizations are co-existent and conterminous so far as concerns their entities, but not so as regards the local divisions and the class-divisions respectively; for the two organizations interpenetrate each other.

The term horde has been proposed for the subdivisions of the local organization, where descent is counted in the community through the mother, while the well known term clan remains to be applied to the divisions of those tribes in which descent is counted through the father. This distinction is very necessary, since the word *clan* has been used so loosely in regard to Australian tribes and to their local and even their social subdivisions by some writers, as to have caused unnecessary confusion of thought.

I take the *Local Organization* of the Dieri as an example which, *mutatis mutandis*, is applicable to all the tribes herein dealt with.

It is distributed through the tribal country in five great local divisions, as follows:—

1. Pondo Pina—Lake Hope.²
2. Kopperamana—South-west of Lake Hope.
3. Kilpanina—West of Kopperamana.
4. Kathithandra—The junction of the Barcoo River (Cooper's Creek) with Lake Eyre.
5. Kūramina—Blanchewater.

The Yandairunga tribe is divided into two principal hordes:—
1. Yandairunga; 2. Thidnūngūra. It seems from Mr. Hogarth's statements that the name Yandairunga applies also to the whole tribal country, and that thus while one part of the tribe is Yandairunga, the other part is Thidnungura as well as being Yandairunga.

The *Social Organization* of Australian tribes is now so well known and has been so fully illustrated in many works and memoirs, that it is unnecessary for me to make any general statements, and I may content myself with referring the reader

¹ e.g., Woiworung tribe of the Yana River, Victoria.

² Pondo = lake, pins = great. In the Yantruwunta language called Bando-pina.

for further information to various papers in which I have dealt with the subject.¹

All the communities referred to in this paper have a class organization framed on that which I have elsewhere spoken of as the Barkinji type. That is to say, it divides into two principal classes, each of which is represented by a more or less numerous group of totems.

The members of the class divisions of the Dieri are distributed over the whole tribal country in the various local groups. The divisions are perpetuated by the children inheriting the class name and the totem name of their mother. The descent therefore is matriarchal.

I became aware of this many years back when I commenced systematically to work out the Dieri customs. My informants were the Lutheran missionaries at Lake Hope, and they were quite clear as to the descent of the "murdu" names. Their statements also fell into line with the facts I had collected as to other tribes, and as it accorded with the status of marriage of the Dieri, I saw no reason to doubt their accuracy until I observed a communication from Mr. J. G. Frazer in the "Journal of the Anthropological Institute" on the "Dieyerie Tribe," containing certain statements by Mr. Gason, who therein says distinctly that "the sons take the fathers' class, the daughters the mothers' class," and he illustrates this by taking the totems, "dog" and "rat," as instances. This statement came to me as a complete surprise. The rough draft of this paper, containing a tabulated statement of the Dieri class system together with my statement that the totems were inherited from the mother, had been submitted to Mr. Gason for his perusal and remarks, and that gentleman had returned it to me without any comments on that part of my subject. From my knowledge of the status of the Dieri tribe and from analogy with other neighbouring communities, I came to the conclusion that in this matter Mr. Gason's memory was at fault, or that this might be a matter as to which he had not made such accurate observation as seems to have been usual with him. It was well to settle the matter without delay, and I again communicated with the missionaries in the Dieri country. Those who had been my former correspondents had now left, but from the Rev. J. Flierl I received the most ready and kind attention. He most obligingly continued his enquiries for me after his first reply,

¹ "From Mother-right to Father-right," A. W. Howitt and Lorimer Fison, "Journ. Anthropol. Inst.," August, 1882, vol. xii, p. 30. "Notes on the Australian Class Systems," "Journ. Anthropol. Inst.," May, 1883, vol. xii, p. 496. "Further Notes on the Australian Class Systems," "Journ. Anthropol. Inst.," August, 1888, vol. xviii, p. 31.

² Vol. xvii, No. 2, p. 185.

which confirmed the broad statement that the children of both sexes inherit the totems of their mothers. In order to have some distinct instance as a test I requested him to enquire regarding the deceased Headman, Jalina Piramurana, whom Mr. Gason has so frequently mentioned in his communications to me, and who was the Headman at the time when I knew the Dieri tribe personally. I believed this man to have been of the Manyura (Portulacca) totem, but I know no more.

Mr. Flierl's replies amounted to the following, and they were based upon the statements of the Dieri elders:—

1. The Dieri children, boys and girls, take the murdu of their mothers. If a man of the Kintala (Dog) murdu has a wife of the Kokula (Rat) murdu, all their children, both boys and girls, will be of the Kokula murdu.

2. Jalina Piramurana was of the Manyura murdu. His mother was of the Manyura murdu, and his father was of the Warugati (Emu) murdu.

It is therefore abundantly evident that the Dieri totems have matriarchal descent, and that the tribe therefore makes no exception to the general rule.

Mr. Hogarth's statements show that descent in the Yandairunga tribe follows the same rule.

I regret that I am now unable to give more than three of the systems of tribes spoken of herein, but since they are those of tribes which mark the western and the eastern limits of these tribes and also of the Dieri, which is the typical community, it may be taken as a reasonable assumption that similar class systems extend over the whole of the area referred to in this memoir. It is probable that the northern boundary of this typical system is somewhere about Birdville, on the Diamantina River, where I have reason to believe a system framed on the ordinary Kamilaroi type is found.

To the eastward the Kunandaburi tribe is not far distant from those which have class systems of the Kamilaroi type. To the south-west the two Dieri classes, Kararu and Materi, occur as far as Port Lincoln. We may conclude that the same type of social organization extends so far. I have no information as to the class systems of tribes in the desert country to the west of the Yandairunga.

As I have said, these communities have two intermarrying exogamous class divisions, each having a numerous group of totems. I now give the systems of the Dieri, Yandairunga, and Kunandaburi tribes:—

DIERI.

Materi	{	Karaura	Eagle-hawk.
		Warugati	Emu.
		Malura	Cormorant.
		Kopiri	Iguana.
		Kintala	Dog.
		Padi	Caterpillar.
		Tikanara	Native cat.
		Puntā	A mouse.
		Maiaurū	A rat.
		Pitcheri	Duboisia Patersoni.
		Kirapara	Bone fish.
Kararū	{	Markara	Mullet.
		Talara	Rain.
		Kaualka	Crow.
		Kararū	Red ochre.
		Buralko	Native companion.
		Kanunka	Bush wallaby.
		Chūkūrū	Kangaroo.
		Woma	Carpet snake.
		Malka	The Mulga tree.
		Karapana	A mouse.
		Kokūla	A rat.
	{	Tidnamara	Frog.
		Kanaura ¹	Seed of Portulacca oleracea (Linné).

¹ Manyūra, the Portulacca oleracea, is also a totem, but I do not know of which division; probably, however, of Kararu, for the father of Jalina was Warugati.

Since writing this note, I have received a communication from the Rev. J. Flierl, in which he says, "the Manyura murdu belongs to the class Kararu." He adds, "the old man, Pitulina, who gave me the information as to the murdus of Ialina and those of his father and mother, is now dead; but I learn from another very old man, named Ngudupina, that his own murdu is Runtyeri of the Materi class, and that the murdu of his mother was Kuntyeri, and of his father Karku, of the Kararu class." No doubt can, I think, now remain on these questions.

YANDAIRUNGA.

Materi	{	Kūraa	Eagle-hawk.
		Tantani	Cormorant.
		Kopri	Iguana.
		Kadni	A lizard.
		Mūdla	Dog.
		Wadnamura	An insect.
		Wūrdigi	The Mulga tree.
		Kirki	Night hawk.
		Kūrdmūri	Bull-frog.
Kararu	{	Upala	Cloud.
		Wakalo	Crow.
		Arkaba	Red ochre.
		Thalka	A rat.
		Kokola	A wallaby.
		Waranati	Emu.
		Kūrarū	Musk duck.
		Wanbūra	A snake.

KUNANDABURI.

Matara	{	Kūlbara	Emu.
		Kani	Friiled lizard.
		Wirijūra	Kangaroo rat.
		Mūrūthera	Opossum.
		Kokola	Bandicoot.
		Korinya	A small wallaby.
		Korimora	Brown snake.
		Kopūla	Speckled brown snake.
Yūngo	{	Kūntara	Native companion.
		Taldra	Kangaroo.
		Tūragūrū	Iguana.]
		Titi	Dog.
		Wogarachi	Crow.
		Kogūnya	Blue crane.
		Warangūni	Carpet snake.
		Orikomatū	Frog.

In these systems there is one common class name, namely, Materi, or in its Kunandaburi form, Matara; and I should fully expect to find on enquiry that in accordance with that which obtains elsewhere, Kararu would be recognized as the equivalent of Yungo wherever two tribes are in contact of which one has the former and the latter name. The geographical range of Materi is at least seven hundred miles from the Kunandaburi country to Port Lincoln, and it is certainly accompanied by Kararu or its equivalent.

The groups of totems are not completely given in these tables. My correspondents all agree upon this. The native informants are rarely fully acquainted with, or perhaps it would be better to say, that they do not recall all the totem names. Totems which had few members have now in some cases completely died out through the almost complete extermination of tribes by reason of the settlement of the country.¹ An inspection of the lists given leads me also to suspect some inaccuracies. Totems occur in one list under one class and in another list under the opposite class, though in no case is this coincidence found in the same tribe, and it is quite possible that this may be an error which has crept in through the native informant being confused by many questions. I have found this to be the case especially after a long interview when giving me the names of those totems with which they had least connection; that is to say, with which their own kindred had not married.

The Dieri and the Yandairunga call the totems *mürdū*, the Kunandaburi call them *gaura*. According to Mr. Gason the two principal totems of the Dieri system are Warugati (Emu) and Talara (Rain), and he adds that it is always a matter of ambition with parents to marry their children into one of these "murdus." This of course means that the Kararu people would desire to marry into the Talara murdu, and the Materi people into the Warugati murdu. Such a pre-eminence of a totem above its fellows would, one would think, tend towards hereditary chieftainship.

The law of marriage in these classes is the usual one. Taking the Dieri as an example, a man of the Materi class marries a Kararu woman, and *vice versa*, always however subject to certain provisos and restrictions to which I shall refer in the section on "Marriage."

In the Dieri case there is not, according to the statements of my informants, any rule such as obtains in certain tribes; for instance, the Kuinmürbūra near Rockhampton in Queensland, whereby certain totems marry only with certain other totems. A Materi man may marry a Kararu woman of any totem, always subject to the above-mentioned provisos and restrictions, and

¹ I know an instance when the blacks were not permitted by the white occupiers of their country to roam over it, but were compelled to live in certain places, and these were not the most favourable localities on the run. The result was semi-starvation, followed naturally by cattle killing, and this then led to the tribe being, in the euphemistic phrase of the frontier, "dispersed." When I finally returned to the settlements from Central Australia, the Dieri elders at Lake Hope earnestly besought me to tell the "white fellows," who they had heard were coming to settle in their country, to "set down with their cattle on one side of the lake, and to leave the other side to the Dieri, so that they might live peaceably together." After the settlement of that district the usual consequences followed, including the besieging of the station by the Dieri.

vice versa as to a Kararu man. But while there is no such rule as to the intermarriage of certain totems only in the Dieri or Kunandaburi tribes, there is some evidence that it obtained with the Yandairunga. As to the other tribes mentioned in this memoir, I have no evidence.

Mr. Hogarth has given me a list showing how the totems intermarry in the Yandairunga, which is as follows:—

1. Kurara	marries with	Kuraru, Arkaba, and <i>Waranati Wakalo</i> .
2. Tantani	"	Thalka, <i>Arkaba</i> .
3. Kopri	"	Kokala.
4. Kadni	"	Kokala.
5. Mudla	"	Kuraru.
6. Wadnamura	"	Wanbura, <i>Upala, Wakalo</i> .
7. Wurdigi	"	Warawati.
8. Kurdmuri	"	Thalka.
9. Upala	"	Wadnamura.
10. Wakalo	"	Wadnamura, <i>Kurara</i> .
11. Arkaba	"	Tantani, <i>Kurara</i> .
12. Thalka	"	Tantani, <i>Kurumura</i> .
13. Kokola	"	Kadni, <i>Kapri</i> .
14. Warawata	"	Kurara, <i>Wurdigi</i> .
15. Kuraru	"	<i>Mudla</i> , Kurara.
16. Wanbura	"	Wadnamura.

An inspection of this table shows that it is imperfect, as indeed Mr. Hogarth himself says. According to the ordinary, I may even say the universal, rule, that sisters are exchanged as wives, there should be reciprocity in the marriages. In the above list this is the case as to 2, 4, 6, 12, 13, 16, and therefore the belief is so far justified that it may be so in the other totems. This same principle of reciprocity would supply certain other cases which I have added in italics. There is also some evidence that the totem marries only into a certain group of the opposite totems, for Mr. Hogarth says, "Kūrara claims as a birthright to marry with the murdus Kuraru, Arkaba, and Wakalo," but he then adds, "A man of the Kurara murdu cannot, however, claim all the women of these murdus as his 'Piras.' The number is restricted, but in what manner is not known to me." In the section on "Marriage" it will be shown how in the Dieri tribe a man, though he is entitled by birthright to marry in any of the totems of the other class, cannot claim all the women in them as his Piraurus.

There is a strong feeling of fellowship between all those of the same totem. On the arrival of a visitor at a camp he is entertained by his relatives, or in default of them by his "murdu." "Those of the same totem keep together, eat and live together, and lend each other their women. Even strangers from a distance of three or four hundred miles are thus hospitably entertained. The first question is 'Minna murdu?'

that is to say, 'What is your totem?' The surrounding and distant tribes have some totems different to those of the Dieri, but these can always find out which are the same" (Vogelsang).

With the Yandairunga it is the same. A strange visitor arriving at a camp is entertained by men of the same totem as himself.

§ 4. *Relationships.*

That system of counting relationships which obtains among the Australian aborigines, has long been known to occur in other parts of the world among savage and barbarous races of mankind. Since it was first brought under notice by the laborious investigations of the late Dr. Morgan, the classificatory system of relationship, as he termed it, has been the subject of much controversy, and the opinions formed as to the origin and the real meaning of this system of relationships have been various. Even among those who as settlers in the Australian bush have been brought into daily contact with the black fellow during the course of a lifetime, one may say with safety that there are few if even any who have taken the trouble to thoroughly master the details of the system or who, if they have done so, have formed any true conception of the foundation on which the relationships rest, or the root out of which they have sprung. How much more difficult must it then be for those who, living in countries separated by thousands of miles from any lands wherein they could study savage life, are compelled, if they desire to study the subject, to have recourse to information at second-hand superficially collected by travellers or by investigators who carried to the task the ingrained beliefs as to relationships which form part almost of the mental texture of civilized man.

In order to clearly see the true nature and bearing of the classificatory system of relationships, it is necessary for the investigator to be so intimately acquainted with those savages who use it that he can, so to say, think with their thoughts and reason with their minds. For notwithstanding all statements to the contrary, it is certain that savages reason, and do so logically within the limits of their experience. But this would not suffice of itself, but he must also have a competent knowledge of their customs and of the organization of their society before he could venture with safety to attempt the difficult task of explaining the true nature of the relationships, and of offering a reasonable hypothesis of their origin. This is the task which

I have set before myself, and I will leave it to anthropologists to assign a value to my results.

Before commencing the task of considering critically the Dieri system of relationship, I must premise that no two tribes of which I have knowledge have precisely the same terms or have the terms arranged with the same relative bearing.

These systems, when collected and compared with each other, form a series from the most simple system to that which is most differentiated in its relations, and therefore most complicated. They form a progressive series, but the progression is not on all fours with the advanced status of the tribe. That is to say, it does not prove on examination that the most advanced system of relationships is used by the most socially advanced tribe. The general result is so, but cases occur where a tribe will be found which has lost its class-system, which has only traces of the sexual license of the Dieri, and which has individual marriage completely established with descent through the male line, but which yet uses a system of relationship which is of the most simple and archaic type. It is not now my intention to discuss why this is, for to do so would carry me beyond my present purpose.

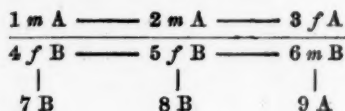
The subjoined tabulated statements of the Dieri relationships have been most carefully examined and checked by me, and have been finally referred to the correspondents by whose assistance they were compiled. These gentlemen have with the most kindly patience submitted to a reiterated cross-examination which I fear must have severely tried them. So far as I can say I believe the lists may be accepted as accurate, and in these matters accuracy is of the first importance. It was, I think, the late Charles Darwin who said that the effects of false inferences are of but little moment, for every one feels a pleasure in setting them straight, but that false facts are most dangerous because there may be but few who can point out their untruth.

I have given the results obtained from four correspondents. It will be seen that they agree almost completely, and that in some cases of difference the terms are synonymous.

In this section I propose to show how these terms fall naturally into certain related groups, and also how one set of terms can be forecast by an inspection of the others. I shall not now offer any hypothesis to account for this, leaving it to be considered in the final section, as also such conclusions as may appear to justly arise as to the origin and development of the remarkable system of relationship which the Dieri have in common with all Australian tribes.

In considering these groups I have found it a great aid to

represent a group of people who are in the necessary relations to each other by the subjoined diagram—



The explanation of this diagram is as follows:—The numerals are for shortness of reference; *m* = male, *f* = female, A = one of two Dieri classes, B = the other class.

Nos. 1 and 2 represent two brothers, 3 represents their sister. Nos. 4 and 5 represent the wives of 1 and 2, and No. 6 the husband of 3. Nos. 4 and 5 are sisters, and 7, 8, 9 represent the children, say a son in each case of the three couples respectively. Moreover the three couples may represent that which is a rule with the Dieri as among other tribes, namely, that the men in the above groups are married to each other's sisters, own or tribal.

The diagram gives all the relations shown in Table A if we consider it to represent either a group of brothers with their wives, or a group of brothers one of whom is married, or a man and woman who are Noa to each other, with another couple who are the Piraurus of the former. The diagram may also represent the group referred to by Mr. Gason at p. 49, or to represent a Pirauru group.

By inspecting the diagram one can see why 1 and his brother 2 are both "addressed" as husband by 4 or by 5. Both these men are *de facto* "husbands," although one may be a Noa husband and the other a Pirauru husband. The Dieri terms when strictly applied also recognize this distinction by attaching the qualification "Waka" to the marital term when applied to 4 by 2, or to 5 by 1. No. 2 being the "sister's husband" of 4 is the same individual as the "husband's brother," and he is therefore also "Noa waka." A similar explanation shows why it is that the "brother's wife" is Noa waka.

I have added to the marital group the two relations of "wife's brother" and "husband's sister," which are shown upon the diagram. It becomes evident that the "wife's brother" forms part of a group analogous to the one which I have now been showing, and that the "husband's sister" is of that group which stands in a marital relation to it.

TABLE A.—MARITAL GROUP.

	Gason.	Vogelsang.	Meyer.	Flierl.
F	Husband ..	Noa ..	Noa ..	Noa.
	Husband's brother ..	Noa wauka ..	—	Noa waka or Yimari.
	Sister's husband ..	Noa wauka ..	Yimari ..	Noa waka or Yimari.
	Accessory husband ..	Piraooroo ..	Nginyaru ..	Pirauru or Nginyaru.
	Wife ..	Noa ..	Noa ..	Noa.
	Wife's sister ..	Noa wauka ..	Yimari ..	Noa waka or Yimari.
	Brother's wife ..	Noa wauka ..	Kamari ..	Kamari.
M	Accessory wife ..	Piraooroo ..	Piranguru ..	Noa. ♀
	Wife's brother ..	Kareti ..	Kadi ..	Kadi.
	Husband's sister ..	Kamari ..	Kamari ..	Kamari.

TABLE B.—PARENTAL GROUP.

	Gason.	Vogelsang.	Meyer.	Flierl.
Father	Apiri.. ..	Appiri	Apéri.. ..	Apéri.
Father's brother ..	Apiri wauka..	Appiri	—	Apéri waka.
Mother's sister's husband..	Apiri wauka..	Appiri	Apéri waka ..	Apéri waka.
Mother's pirauru ..	Apiri wauka..	—	—	Apéri waka.
Mother	Andri	Ngandri	Andri.. ..	Andri.
Mother's sister ..	Andri wauka	Ngandri waka	—	Andri waka.
Father's brother's wife ..	Andri wauka	Ngandri	Andri waka ..	Andri waka.
Father's pirauru ..	Andri wauka	—	—	Andri waka.
Mother's brother ..	Kaka.. ..	Kaka.. ..	Kaka.. ..	Kaka.
Father's sister's husband ..	—	Kaka.. ..	Kaka.. ..	Kaka.
Father's sister ..	—	Papa.. ..	Papa	Papa.
Mother's brother's wife ..	—	Papa.. ..	Papa	Papa.

The first part of Table B represents a paternal group; the second part represents a maternal group; the latter part represents two relationships which differ from either of the former. Why is this? The diagram already used will be again of service in giving some reply. Let us take 7 as the individual to start from. 1 is his father, being Noa to 4, who is his mother. But we know that 2 also stands in the marital relation to 4, and is therefore father, but being, for instance, a "group" husband, is qualified by the affixed term *waka*. 2 is, however, also the "mother's sister's husband," and the "mother's sister's husband" being also evidently the same individual as the "father's brother," stands necessarily in the position of "group father" to 7, as well as to 8.

A further comparison of the diagram with the table will show why it is that the maternal relation indicates a group and not merely an individual. Nos. 4 and 5 are both wives of 1, and therefore both stand in the maternal relation to 7. Similar considerations show that 1, 2, 4, and 5 are in parental relations to 7 and 8.

It is further quite evident that 3, the "father's sister," being of the same class as 1, cannot possibly, under the Dieri system, stand in the marital relation to him, and therefore cannot stand in the maternal relation to his son 7, nor to 8, the son of 2. Neither can 6 stand in any such relation to 7 or 8. The relation is quite a different one, and has been distinguished in this system accordingly, by a distinct term.

It will suffice also to point out that the diagram shows why the mother's brother and the father's sister's husband are both called *kaka*. They are the same group, and receive therefore the same designation. The same can be seen to be the case as regards the father's sister, and the mother's brother's wife. Both relations indicate 3.

Table C shows the reverse terms to those given in Table B. The arguments used as to the latter apply also *mutatis mutandis* to the present case. These relationships follow naturally from the former. Although the several informants have not completed their several lists, sufficient has been done individually and collectively to enable one to obtain with sufficient contrast a complete list.

The remarkable feature herein is in the last term given—which is used here in the sense of "son," and would, perhaps, indicate a survival of a relation between the brother and sister which no longer exists excepting under the most unusual conditions in the Kunandaburi tribe, and which the Dieri regard with abhorrence.

TABLE C.—FILIAL GROUP.

		Gason.	Vogelsang.	Meyer.	Flierl.
M	Son	Athamoora ..	Ngata mura ..	Ngata mura ..	Ngata mura.
M	Brother's son ..	Athamoora ..	Ngata mura ..	Ngata mura ..	Ngata mura.
M	Wife's sister's son ..	Athamoora ..	Ngata mura ..	Ngata mura ..	Ngata mura.
M	Pirauru's son ..	Athamoora ..	—	—	—
F	Son	Athani ..	Ngatani ..	Ngatani ..	Ngatani.
F	Sister's son ..	Athani wauka	—	Ngatani ..	Ngatani.
F	Husband's brother's son ..	Athani ..	—	Ngatani ..	Ngatani.
F	Pirauru's son ..	Athani ..	—	—	—
M	Sister's son ..	—	Tinara ..	—	Tidnara.
F	Brother's son ..	—	Ngata mura ..	Ngata mura ..	Ngata mura.

TABLE D.

	Gason.	Vogelsang.	Meyer.	Fierl.
Elder brother..	Nichie ..	Negi ..	Negi ..	Negi.
Elder sister ..	Kakoo ..	Kauku ..	Kaku ..	Kaku.
Younger brother ..	Athata ..	Ngatata..	Ngatata..	Ngatata.
Younger sister ..	Athata ..	Ngatata..	Ngatata..	Ngatata.
Father's brother's son ..	Nichie or Athata ..	Negi or Ngatata ..	Negi or Ngatata ..	Negi or Ngatata.
Father's brother's daughter..	Kakoo or Athata ..	Kauku or Ngatata ..	Kaku or Ngatata ..	Kaku or Ngatata.
Mother's sister's son ..	Nichie or Athata ..	Negi or Ngatata ..	Negi or Ngatata ..	Negi or Ngatata.
Mother's sister's daughter ..	Kakoo or Athata ..	Kauku or Ngatata ..	Kaku or Ngatata ..	Kaku or Ngatata.
Father's Pirauru's son ..	Nichie or Athata ..	Negi or Ngatata ..	Negi or Ngatata ..	Negi or Ngatata.
Father's Pirauru's daughter	Kakoo or Athata ..	Kauku or Ngatata ..	Kaku or Ngatata ..	Kaku or Ngatata.
Father's sister's son ..	Kummie ..	Kami ..	Kami ..	Kami.
Father's sister's daughter ..	Kummie ..	Kami ..	Kam ..	Kami.
Mother's brother's son ..	Kummie ..	Kami ..	Kami ..	Kami.
Mother's brother's daughter	Kummie ..	Kami ..	Kami ..	Kami.

The four first terms require no comment. The second division of the table represents the relations to each other of 7 and 8 in the diagram, it being indifferent whether 7 and 8 are male or female. It follows since 7 and 8 are both in the filial relation to 1 and 2 and to 4 and 5, that they are brothers or sisters as the terms imply. The third division of the table shows the relations of 7 and 8 to 9. It is not possible that the father or mother of 7 or of 8 can stand in marital relations to the father or mother of 9. The class laws forbid this. Hence 7 and 8 cannot be in fraternal relations to 9. Hence a different term is applied to show a different relation.

Finally I must point out again that the individuals shown in the diagram may be "groups," and that it is necessary in applying the diagram as a key to the tables to further remember what has been said as to the Pirauru practice of these tribes.

So much briefly as to the Dieri terms of relationships. I have not given a full and complete list, as no special interest attaches for instance to the "grand-ancestral" terms. Enough has been given to show the principle underlying the system, which is that of "group relationship" based upon "group marriage."

I now supplement the Dieri tables by others showing such of the Kunandaburi and Yandairunga terms as I have collected. It will be seen that they fall generally into the same lines as those of the Dieri, and the explanations which I have already given apply equally to them.

TABLE E.—MARITAL GROUP.

				Kunandaburi.	Yandairunga.
F	Husband .. ..	..	..	Nūbia	Nūpa.
	Husband's brother .. ..	..	..	Nubia Kodi moli ..	Nupa.
	Sister's husband .. ..	..	..	Nubia Kodi moli ..	Nupa or Būlya.
	Accessory husband .. ..	..	..	Dilpa mali	Pira.
	Wife .. ..	..	..	Nubia	Nupa.
M	Wife's sister .. ..	..	..	Nubia Kodi moli ..	Nupa or Bilya.
	Brother's wife .. ..	..	..	Nubia Kodi moli ..	Bilya.
	Accessory wife .. ..	..	..	Dilpa mali	—
	Wife's brother .. ..	..	..	Kokūndi	—
	Husband's sister .. ..	..	..	Kurangi or ūluga ¹ ..	—

¹ Uluga = elder woman.

TABLE F.—PARENTAL GROUP.

	Kunandaburi.	Yandairunga.
Father	Urninū	Kuyia.
Father's brother	Kauali	Kuyia.
Mother's sister's husband	—	Kuyia.
Mother	Amundi	Luka.
Mother's sister	—	—
Father's brother's wife	Amundi	Luka.
Mother's brother	—	—
Father's sister	Uluga	—

TABLE G.—FILIAL GROUP.

	Kunandaburi.	Yandairunga.
M Son	Karaga	Wardu.
M Brother's son	—	Wardu.
Wife's sister's son	—	—
M Sister's son	Denali	—
F Son	Worūa	Wardu.
F Sister's son	Worūa	—
Husband's brother's son	—	—
F Brother's son	Karaga	—

TABLE H.—FRATERNAL GROUP.

	Kunandaburi.	Yandairunga.
Elder brother	Kokūndi	Nūthi.]
Elder sister	Kūrauye	Kaku.
Younger brother	Apogi	Kubaka.
Younger sister	Apogi	Kubaka.
Father's brother's son	Kokūndi or apogi ..	Nūthi.
Father's brother's daughter	Kurauye or apogi ..	Kaku.
Mother's sister's son	—	Nūthi.
Mother's sister's daughter	—	Kaku.
Father's sister's son	—	Witima.
Father's sister's daughter	—	Bilya.
Mother's brother's son	—	Witima.
Mother's brother's daughter	—	Bilya.

One matter now remains to be noted as to the relationship terms of the Dieri. I touch upon it with reluctance, but on grounds which will become clear to the reader I am obliged to do so.

Mr. E. M. Curr in his late work on the "Australian Race," says¹ that there are words used by the aborigines which have the same meaning as our substantive collective terms, uncle, aunt, nephew, niece, cousin, and so on. It will be well to consider this statement here because he gives a table of Dieri terms, derived from Mr. Gason apparently, in support of his statement. Each of the terms above referred to includes, in our own system at least, two separate relations. For instance, uncle includes father's brother and mother's brother; aunt includes mother's sister and father's sister, and so also with the other terms.

I take the term "uncle" for examination in regard to the Australian term, but any other would do. The diagram used already shows that father's brother, No. 2, and mother's brother, No. 6, are of different classes. It is therefore at once apparent that they cannot stand in the same relation to 7, which would be required by Mr. Curr's statement. I say without hesitation that no one term exists in the Dieri language which includes or can possibly include both "father's brother" and "mother's brother," as does our word "uncle" in the sense in which we use it. As I have shown both by the customs of the Dieri and the relationship terms that the "father's brother" stand in *loco parentis* to No. 7, and is therefore "father" and not "uncle" (i.e., mother's brother); assuming for the sake of argument that the word "*kaka*," which Mr. Curr gives in his list (Vol. I, p. 142), is the nearest equivalent for the term *uncle*. But *kaka* does not merely indicate the mother's brother. It refers to a relation which is borne, as the diagram shows, by No. 6, both as "mother's brother" and as "father's sister's husband."

The application of the diagram to each of the above-mentioned collective terms will show clearly that in each instance the term is made up of two, or of two couples of terms which, looking at the matter from the Dieri standpoint, belong respectively to the two exogamous intermarrying classes. They stand respectively on the opposite sides of the dividing line, and cannot have anything in common towards an individual standing in some relation to one of them.

I now give a correct list in Table F of the principal collective terms referred to by Mr. Curr with the Dieri terms for the several relations, and I leave it to him to show any one instance in proof of his assertion.

So much for the assertion, but there yet remains a statement made by Mr. Curr in connection with this matter which cannot be passed over in silence. At p. 142 of the work referred to occurs a passage in which Mr. Curr charges the Rev. Lorimer

¹ "The Australian Race," Government Printer, Melbourne, 1886.

Fison with "*more suo*" keeping to himself certain terms—that is to say, the substantive collective terms above referred to as being adverse to his argument. Mr. Curr here made a charge of literary dishonesty against Mr. Fison, and I believe he has done so through want of knowledge on his own part of the subject on which he writes. Had he devoted that attention to the question which the nature of the subject requires, he could not have fallen into the error which he has committed, nor would he have so recklessly levelled such a serious charge of literary dishonesty against a fellow-worker in the anthropological field. When he comes to see the nature of his own error, it is to be hoped that he will deeply regret the rash and unwarranted assertion which I have quoted. It appears in a work which has gone forth under the stamp of authority, having been published by the Government of the Colony of Victoria. Only a small proportion of those who may read these charges will from personal knowledge be aware how utterly impossible such conduct as that imputed to him would be to the Rev. Lorimer Fison.

In Table I (p. 54) I have given sufficient of the terms to compare with the table given by Mr. Curr in support of his statement. In it there are certain terms which at first sight seem to indicate each two distinct relations, and would thus be "collective terms" in the sense used. As an example, I take the term *kamari*. This term includes two relations which we call collectively "sister-in-law." But the relations are in fact brother's wife (female speaking) and "husband's sister" (female speaking). The diagram will again be of use here in showing why this is. Taking 4 as the person speaking, her brother's wife and her sister's husband are seen to be the same person, namely, 3. This is therefore not a collective term in the sense used by Mr. Curr, but a "group term," as I have before explained. In the same way *kareti*, used by 1, refers to the same individual, 6, under two aspects but in the same relation.

§ 5. Marriage.

Among the Dieri and kindred tribes there are two forms of marriage: There is the marriage of a man of one class to a woman of the other class, which may be spoken of as "individual marriage," or for convenience as "Noa marriage," using the Dieri term, which is equivalent to our word "spouse." There is also a marital relation existing between a man and a number of women, or between a woman and a number of men, the same rule as to the classes being observed. This latter connection may be spoken of as "group marriage," or for convenience the

TABLE I.

	English terms.	Gason.	Vogelsang.	Flierl.
Father ..	—	Apiri ..	Appiri ..	Aperi.
Father's brother ..	Uncle ..	Apiri wauka ..	Appiri ..	Aperi waka.
Mother's brother..	Uncle ..	Kaka ..	Kaka ..	Kaka.
Mother ..	—	Andri ..	Ngandri..	Andri.
Mother's sister ..	Aunt ..	Andri waka ..	Ngandri waka ..	Andri waka.
Father's sister ..	Aunt ..	Papa ..	Papa ..	Papa.
Brother's son ..	Nephew..	Athamoor ..	Ngatamura ..	Ngatamura.
Brother's son ..	Nephew..	—	Ngatamura ..	Ngatamura.
Sister's son ..	Nephew..	Timara ..	Timara ..	Timara.
Sister's son ..	Nephew..	Athani wauka ..	—	Ngutani.
Brother's wife ..	Sister-in-law ..	Noa wauka ..	Yimari ..	Noa waka or Yimari.
Wife's sister ..	Sister-in-law ..	Noa wauka ..	Kamari..	Kamari.
Brother's wife ..	Sister-in-law ..	Kamari..	Kamari..	Kamari.
Husband's sister ..	Sister-in-law ..	Kamari..	Kamari..	Kadi.
Wife's brother ..	Brother-in-law..	Kareti ..	Kareti ..	Kareti.
Sister's husband ..	Brother-in-law..	Kareti ..	—	Noa waka.
Husband's brother ..	Brother-in-law..	Noa wauka ..	—	Noa waka or Yimari.
Sister's husband ..	Brother-in-law..	Niehie or Athata ..	Negi or Ngatata	Negi or Ngatata.
Father's brother's son ..	Cousin ..	Kummie ..	Kami ..	Kami.
Father's sister's son ..	Cousin ..	Kummie ..	Kakoo or Ngatata	Kaku or Ngatata.
Father's brother's daughter	Cousin ..	Kummie ..	Kami ..	Kami.
Father's sister's daughter	Cousin ..	Kummie ..	Kami ..	Kami.

Dieri word for the practice may be used, speaking of it as "Pirauru marriage." The right understanding of these two systems of marriage, of their relations to each other, and of their social consequences is so important that I feel I shall not need any excuse for entering fully into details as to the Noa and Pirauru systems.

Neither of these two forms of marriage is permitted between persons of the same totem (*murdu*), for these are regarded as being of the same blood, as mother and child, or brother and sister, as the case may be. Nor is it permitted between persons who stand to each other in any of the following relations:—Father, father's brother, father's sister, mother, mother's brother, mother's sister, brother's child, sister's child, father's brother's child, father's sister's child, mother's sister's child, mother's brother's child brother or sister.

These also include the group relations. By this I mean to say that not only would a woman be forbidden to a man as a wife who was the daughter of his mother, but also every woman who stood in the "group relation" of daughter to her.

A man or a woman becomes "Noa" to each other by the woman being promised to him during her infancy by her father or by being allotted specially to him as Noa by the headman and the great council of the tribe. Where a father promises his daughter as "Noa" the agreement is faithfully carried out. A man cannot acquire a Noa until he has passed through the ceremonies of *Wilyaru* and *Mindari*.¹ That is, he cannot take his promised wife, nor would one be given to him, until he has attained the full rank of manhood. A Dieri woman does not become Noa until after the ceremony of *Wilpadrina*,² and she cannot be Noa to more than one man at the same time. This restriction does not apply to the man, who may have more than one Noa at the same time. Each man in time obtains a Noa, but she may be perhaps the old wife of some older man who has been made over to him.

There is no customary law in the Dieri tribe which prohibits a person marrying another of the same horde or lesser local division. The sole restrictions with them depend upon class relation or nearness of kin.

Besides this Noa marriage there is also a form of group marriage which is called by the Dieri *Piraurū*, or as known and observed by the white settlers, and called by them, the "Paramour custom." My attention was, when exploring in that part of Central Australia, attracted by the unusual laxity which I observed in the intersexual relations and the freedom with

¹ See *infra*, p. 82.

² See *infra*, p. 87.

which the Yantruwunta, Dieri, and other tribes proffered their women to friendly strangers.

Mr. Gason, in his well known and valuable pamphlet on "The Dieyerie Tribe,"¹ gave some particulars, and I now proceed to detail the more full and exact information for which I am mainly indebted to him.

Shortly before the holding of the first of the series of initiation ceremonies, which the whole tribe attends, namely, that of Kûraweli wonkana,² the heads of the totems and the elder men meet in council and after deliberation determine which of the people shall be allotted to each other as Pirauru. It is only men who have passed through the Mindari ceremony and girls who have passed the Wilpadrina ceremony who can be Pirauru.

The various couples who are thus allotted to each other are not consulted, and it is not considered whether there is or is not any mutual liking or affection between them. The council of elders decides as to their suitability. That is to say, there must be no disability by reason of class, or of nearness of kinship. In fact, those who may be Pirauru to each other are those who might become Noa.

A few nights previous to the ceremony of Kuraweli wonkana the headman, in slow and measured sentences, with a pause between each sentence, announces the names of each couple of Piraurus, and the words are repeated by one or more of the elders.

At each name a general shout is raised in the camp. This time is one of festivity, feasting, and amusement, and large supplies of food have been collected. Dancing is carried on, and besides this there is for about four hours a general license in the camp as regards the Piraurus. Moreover the Pirauru are when allotted to each other always in that relation in the future, and as a new allotment takes place at each circumcision ceremony it follows that a man or woman may after a time come to have a number of Piraurus.

Mr. Gason has described to me that which he saw on these occasions, in unmistakable terms, which may be paraphrased by saying that the women present and all the men who had passed the Mindari ceremony formed groups of Piraurus in which for the time being complete promiscuity existed.

A man may always exercise marital rights towards his Pirauru when they meet if her Noa be absent, but he cannot take her away from him unless by his consent, excepting at certain ceremonial times when general license prevails between the inter-

¹ "The Dieyerie Tribe of Australian Aborigines," by Samuel Gason, Police Trooper. Cox, Government Printer, Adelaide, 1871.

² See § 8, *infra*, p. 81.

marrying classes, and even on a special occasion mentioned in the class. The ceremonial occasions are, for instance, at the initiation ceremonies or at one of the marriages arranged between a man and a woman of two different tribes. But the consent of the Noa husband is seldom withheld from the male Pirauru.

A Noa husband in ordinary times always takes precedence of a Pirauru, but in his absence the senior Pirauru present takes the wife of the former and protects her during his absence. The Noa wife also takes precedence of the female Pirauru should both be together. For instance, if a man were camped somewhere with his Noa and his Pirauru, the man would sleep next the fire, his Noa next to him, and the Pirauru next to her.

Senior male Piraurus take precedence over junior male Piraurus. These matters are carefully arranged so as to prevent jealousy, but in spite of all this arrangement, most of the quarrels among the Dieri arise out of this Pirauru practice, for under it a husband cannot keep his wife exclusively to himself. Nor do the elder men monopolize the women, for since the women are allotted to many men in course of time, there are in fact no men who have not one or more Piraurus, even if they have not a Noa.

Some example will show how the system works among the male Piraurus. Suppose an elder and a younger man had the same woman allotted to each as a Pirauru. In the event of the younger being at some camp with his Noa and his Pirauru and the elder man being there alone, the latter would have a right to take the Pirauru of the former. Should the two men be at the same camp and without their Noas, the older man might take precedence and have the company for the time of any Pirauru there who had been allotted to both of these men and who was available to them.

But the two men might also occupy the same hut with her, and she would share with both the food she collected.

It has been before said that the elder men do not monopolize the women, but although they have no absolutely exclusive monopoly it is certain that they have very extended privileges. For instance, the Wilpadrina, which is spoken of elsewhere,¹ is the exercise of an exclusive privilege for a time. The headmen also usually have more Noas and more Piraurus than others. The headman, Jalina Piramurana, had over a dozen Piraurus allotted to him, and in addition several women were assigned to him in each of the neighbouring tribes as a mark of respect, as so to say honorary Piraurus. Any man old

¹ See § 8, *infra*, p. 87.

or young was considered to be highly honoured by having one of this headman's Noas allotted to him as a Pirauru. Such men thus distinguished were generally heads of totems or otherwise of note.

The children of the female Pirauru are called "son" and "daughter" by her male Pirauru, and they call him "father," and the children of a woman call the Noa wife of her Pirauru "mother." But if a man were more narrowly questioned he would qualify his statement by saying that the Noa of his mother is his "Apiri mŭrla"—"Apiri mŭthŭ," or his "real father" or "very father," and that the Pirauru of his mother is his "Apiri waka," or "little father." His father's Pirauru would also be more precisely defined as his "Andri waka," or "little mother."

Frequently the women say they are ignorant which man, the Noa or the Pirauru, is the father of any particular child, or they do not admit that there is only one father. Thus the child is indeed the child of the "group father" and not of the individual, which is the natural result of "group marriage."

In the event of a Noa dying a female Pirauru will take charge of her children and attend to them with affection, and not in any way after the manner of a "stepmother." The children of the female Noa and of the female Pirauru are affectionate towards each other, and do not in any circumstances show any jealousy of each other. They are brothers and sisters.

It is an advantage to a man to have as many Piraurus as possible. He has then less work to do in hunting, as his Piraurus when present with him supply him with a share of the food they procure, their own Noas being absent. He also obtains great influence in the tribe by lending his Piraurus occasionally and receiving presents from the young men to whom Piraurus have not yet been allotted, or who may not have Piraurus with them or in the camp where they are.

This is at all times carried on, and such a man accumulates a lot of property, weapons of all kinds, trinkets, &c., which he in his turn gives away to prominent men, heads of totems and such, and thus adds to his own influence. This is regarded by the Dieri as in no way anything but quite right and proper.¹

These particulars as to Noa and Pirauru marriage in the Dieri

¹ This proffering of women as a recognition for friendly presents made by us when exploring in Central Australia, to the tribes which we met with, such as the Yantruwunta, Dieri, and others, was occasionally troublesome. I remember such an occasion, when I had almost forcibly to turn out of the camp a prominent man of the Purdi totem, who had come attended by his two Piraurus, as a friendly attention to ourselves. The two Piraurus were so demonstrative that there could not be any doubt as to the intention, irrespective of Purdi's own statements.

tribe are applicable with slight variations to the other neighbouring tribes, and also as I shall show shortly to the Kunandaburi and even to far distant tribes in Eastern Queensland.

At present I shall continue the subject of the Dieri by speaking of marriages between Dieri and neighbouring tribes which are so to say "state affairs."

Such a marriage, for instance, between two individuals of the Dieri and Murdula tribes respectively is a subject of negotiation for several months. Much diplomacy is used, as one tribe desires if possible to sift out the real reasons which induce the other tribe to desire the marriage. As a preliminary, handsome presents, such as spears, boomerangs, carved shields, bags of all kinds, &c., are sent to the woman's father, to the headman of the tribe, and to the other principal men. In the event of the negotiations falling through these presents are returned. Mr. Gason says that he has known occasions where a match was made in a few weeks, both sides being eager to settle the matter with a view of concluding a peace and of terminating disputes and settling grievances. In these cases marriages were the means of preventing bloodshed. The young man and the young woman have no voice in such a marriage. The mother and the near female relatives of the girl keep up a constant wailing at every idle moment. No encouraging word is given to her, and all she has to do is to obey. Whether she likes the marriage or not, she must submit to the will of the elders of the tribe.

In the tribe itself there is always a hot opposition to a marriage which takes a girl out of it, and the fathers in it who have unmarried and eligible sons, offer every objection to the arrangement.

On such a marriage being settled a place is fixed upon near the boundary between the two tribes, where a great corroboree (Wima) is held. The festivities are kept up for several days during which time free intercourse is allowed between the sexes without regard to existing marriage relations. No jealous feeling is allowed to be shown during this time under penalty of strangling,¹ but it crops up afterwards and occasions many bloody affrays.

If the girl does not take kindly to her husband she very probably tries to escape home, but is on all such occasions pursued, and if captured is brought back to be jeered at by the other women. In some cases the girl is also cruelly ill-used.

If, however, the girl takes to her husband and makes herself popular, she is treated kindly, and it is in her power to command

¹ Nulina = strangling; Nulinuthi = to strangle.

influence with the other women. Should any important matter arise between her husband's tribe and that of her parents she becomes most useful in negotiating with the latter, with which she has naturally more influence than a stranger.

In the Yandairunga tribe according to Mr. Hogarth, to whom I submitted a *précis* of the preceding statements, the marriage relations are precisely those of the Dieri. He said, in writing to me of the Yandairunga customs, "I think that the Yandairunga are identical with the Dieri, although their language is quite different. I believe if you lay down the same manners and customs and ceremonies for both you will be almost absolutely correct."

In this tribe one form of marriage is when a man and woman are Nūpa to each other, and it corresponds to the Noa of the Dieri. In this there is, however, a difference that the girl when quite young is promised by her relations, such as her mother's brothers, her own brothers, to a man who is of course of the suitable class in the tribe. The other form of marriage is that of group to group, and is called "Pira," which is the "Pirauru" of the Dieri with, however, a distinction, which is thus indicated by Mr. Hogarth. He says that men claim certain women as Piras by "birthright." When we remember his statement that certain totems intermarry with certain other totems one comes to see that this claim by birthright is another way of putting this fact forward. Mr. Hogarth also tells me that he does not know in what manner the Piras are allotted to each other. We may be certain from the analogy of the Dieri example that a Yandairunga man would not be permitted to have as a Pira any woman whom he might not have had as a Nupa, and moreover that his "birthright" to certain women as Piras would be controlled by the ceremonial customs. The Yandairunga adjoined the Dieri to the south, and as a neighbouring tribe I think we may assume the members of it attended the Mindari ceremony of that tribe.

Mr. Hogarth adds as an important fact in relation to the marriage customs of the Yandairunga, that it was not lawful for a woman to go to a camp where there were strange men, and talk with them in the absence of her husband, or unless it were at the camp of a near relation. This is indeed a rule of almost or of quite universal application.

Mr. O'Donnell says, as follows, of the Kunandaburi tribe, who have the class divisions Matara and Yungo:—

A Matara may marry a Yungo of any totem but may not marry any totem of the Matara class. The same law applies to Yungo. Female children during their infancy are given by their parents to certain men or boys, who claim them as soon as they

arrive at the age of puberty, and often before. The man asks the permission of the girl's father, or that of the mother will suffice, to take the girl away. He then waits until she is some distance from the camp and seizes her, and drags her away, assisted by a friend who is "Abija" to her, that is, who would have been eligible for her husband had she been promised to him. While dragging her away she resists all she can, biting and screaming, while the other women look on laughing. Having taken her away to a convenient distance they are joined by one or more men. The bridegroom returns to the camp and the marriage is consummated by the Abija and the other men. Sometimes they do not return to the camp with the girl for two or three days. When the girl is brought back there is what may be described as a continuation of the *jus primæ noctis*, in which all males in the camp participate, not even excepting the nearest male relatives of the bride. This marriage ceremony is sometimes kept up for many days, there being a dance each night. The bride is then taken possession of by her husband. If she runs away from him she is subjected to severe punishment by beating or by cutting with a knife¹. This marriage relation is called by the Kunandaburi Nūbia, and it agrees with the Noa of the Dieri and the Nūpa of the Yandairunga.

The Kunandaburi have also the equivalent of the Pirauru which is called by them Dilpa mali. It is, as Mr. O'Donnell puts it, a group of Matera men cohabiting with a group of Yungo women, or *vice versâ*. They do not always camp together, but when they meet they exercise marital rights, and moreover are constantly changing their Dilpa malis. Every woman, he says, may have as many Dilpa malis as she likes, so long as she does not transgress the class laws. The husband (Nubia) does not raise objection, indeed men often exchanged wives temporarily.² It is rare that the men quarrel about women; yet occasionally they beat the women through jealousy, but do not always get the best of it. Mr. O'Donnell tells me that at times the women beat the men severely single-handed. The husband, that is, the Nubia, accepts some trifling present from the Dilpa mali as his due.

¹ When in the Cooper's Creek country before it was settled, I observed most formidable knives in use by the natives. They were made of a flake of flint embedded in a lump of gum. This being held in the hand with the sharp cutting edge outwards, formed a terrible weapon at close quarters, with which it was possible to inflict fearful wounds on the naked body of an adversary. In such proceedings as those referred to above I have heard of women being almost cut in pieces.

² I remember an instance of the loan of a wife even in the Kurnai tribe. One ancient had two wives and another ancient, who was going on a journey, had none. The former lent him one of his two, and explained it by saying, "The poor fella go long way, that one very lonely."

Besides these marital relations which exist between the groups of Dilpa malis there are such also between men and their brothers' wives and women and their sisters' husbands, but in these cases it is *sub rosa* and not an open and recognized connection as is that of the Dilpa mali.

A man is the Nubia of his wife and the Nubia-Kodimoli of his brother's wife. When the brother dies the former ceases to be the Kodimoli of the widow, and becomes her Nubia, and her children call him father.

Mr. O'Donnell did not, I regret to say, explain to me how the Dilpa malis became allotted to each other, nor anything more as to the Wira-jinka custom which I shall now mention. He left that part of Australia and I learned no more from him. I cannot, however, doubt that the allotment takes place under some recognized law such as that of the Dieri. All such matters are governed by ceremonial custom.

The Wira-jinka of the Kunandaburi is one of these ceremonial customs which are by them spoken of as Mūni. In this case the Mūni or ceremony terminates by all the men present having intercourse with one woman who has been selected beforehand. Wira-jinka means literally *emissio seminis*, and is held when only a few are present as well as when there are large gatherings. The woman is selected from either class, and all the men and boys present have intercourse with her, no matter what the relationship.

The Wira-jinka is also practised in certain cases of sickness.¹ Similar statements have been made to me by Mr. C. M. A. King, police magistrate at Silveston, in New South Wales, as to three tribes in that district, namely, the Girmoduchie, Punthiemira, and Wankamira. These tribes have the classes Kilpara and Mukwara. Mr. King enters very fully into details which supplement those given by Mr. O'Donnell, which are, however, not easy to reproduce in print.²

During the writing of this paper some important evidence as to the existence of a form of Pirauru marriage in tribes still more remote from the typical Dieri has reached me from my valued correspondent, Mr. J. C. Muirhead. He says, as follows, speaking of the Wakelbura tribe of the Belyando River in Queensland:—

Take as an example seven men of this tribe, all of the Smallbee totem, of the Kurgilla sub-class of the Matera class. They are some of them own, some of them tribal, brothers—that is to

¹ Such customs as these are probably more general than may have been suspected. A similar extreme license occurs, according to Mr. Fison, among the Nauga tribes, of Fiji, when circumcision is practised on the illness of a chief.

² I have anticipated any future use which I might make of these details by communicating them *in extenso* to Dr. Tylor.

say, some of them have the same father and mother, while some are of the same totem. One of these men is married, his wife being carpet-snake, of the Obukan sub-class of Wuthera class. That is the totem which marries with theirs. All these men call her "wife," and she them "husband," and the seven men all have and exercise marital rights over her. Her children call all the men "father," and all the men are bound to protect the children.

This is unmistakably a form of Pirauru marriage, and I communicated it to Mr. Gason, who wrote to me in reply giving the parallel Dieri practice.

He says: "If there are five brothers, two of them own brothers, the rest merely tribal brothers, that is, men of the same Murdu, and one of them has a wife, by their customs and natural laws the whole five exercise marital rights over her, but the four only in the absence of the husband. They are her natural guardians, and take precedence over everyone except her Noa and her Piraoroo. All her children are 'Athamoorana' to the five men, and they are 'Apiri' to the children. These laws are identical with those of the Eastern Queensland tribe which you mentioned to me in your letter."

This instance given by Mr. Gason will also apply *mutatis mutandis* to a case of a man and the sisters of his wife (Noa).

§ 6. Headmen and the Tribal Council: the Punishment of Offences.

It is of great interest to enquire what form is taken in these tribes by the authority which governs the relations of its members towards each other, to the community as a whole, and to neighbouring kindred tribes. Some writers have stated that in Australian tribes there are no chiefs, and also with more or less distinctness that there is no "government," and that the tribesmen do that which seems right to their individual selves. Quite lately statements such as these have been restated in a work of authority, and it is therefore well to see in this particular instance what the evidence of so competent a witness as Mr. Gason amounts to.

Simply as a question of terminology it would be well to avoid the use of the term "chief" in reference to the Australian blacks, because the word suggests the hereditary chieftainships with which we are familiar in some of the Polynesian tribes. But it is certainly erroneous to assert that there are no men who have controlling powers, and that every man may do that which is right in his own eyes.

The statements already made show that in the Dieri tribe as in, I may venture to say, all other Australian communities, there is some social authority apart from public opinion which takes cognizance of offences against the community by individuals, and is competent to redress them. Such a case would be cases of intercourse which are incestuous according to the laws of the Dieri, and are called by them *Buyulu parchana*.¹

As a matter of course there is in each totem some man who is older than all the other men. By reason of this superior age he becomes the head of his totem and is called "*Pina-pinaru*," that is to say, "the oldest of the old," or also "the greatest of the great."²

He is the head of his totem and has authority in it as such. His authority is of course restricted to his own totem, and he has no authority in another totem. But though he is thus the head of his own totem it does not necessarily follow that he has the greatest authority and influence in it. In other words, though he may be the head of his totem because of his seniority it does not necessarily follow that he is what may be called the headman of it. He will, however, have this position also if to superior age he adds great ability of some other kind. For instance, an old man whom I knew at Lake Hope was the head of the *Karawūra* totem, but he was not a warrior, an orator, or "doctor," and had little or no influence in the tribe beyond his own totem. This is an instance of a man who was head of his totem, but not its headman. On the other hand, *Jalina Pira-mūrana*, the head of the *Manyūra* totem, was eminent as a warrior and "doctor," and was at the time when I knew the tribe its recognized principal headman. He is frequently mentioned in this memoir. I may now briefly say that there are headmen of totems, of hordes, and finally of the whole tribe.

These heads of totems and headmen of the tribal organization, the great warriors, the distinguished orators, the powerful wizards, form a council which holds its meetings in secret, and thereat decides upon matters affecting the welfare of the tribe and deals with offences committed against it or against public morality. The extreme interest of this subject requires that I should in illustrating it give the statements of Mr. Gason as I have them now before me in the manuscript, which I put

¹ See p. 83.

² I observed the great respect and reverence shown to the very old men. On the borders of Sturt's Desert a deputation of very old men came to me to request that I would visit a "*Pina-pinaru*." I did so in their company, and found him to be of advanced age. The others cared for him with the utmost solicitude, and must have carried him from place to place, for he was unable to walk.

together from his letters and forwarded to him for his inspection and final reconsideration. He says, as follows:—

"A headman of the Dieri tribe attains to power and influence by personal bravery, by eloquence, or by being well connected—that is to say, by having many relations (*Büyülū marpū*),¹ that is to say, 'near relations.' During the time I was with them there was only one headman who had supreme control over the whole tribe. From his extremely polished manner and his gestures, I named him the Frenchman. He was feared and greatly respected by his own and by the neighbouring tribes. Neither his two brothers, both of them inferior to him in bravery and oratorical powers, nor the elder men presumed to interfere with his will or to dictate to the tribe except in minor matters. It was he who decided disputes, and his decisions were received without appeal. Even the neighbouring tribes sent messengers to him with presents of bags, pitcheri,² red ochre, skins, and other things. He decided when and where the ceremonies of circumcision and initiation should take place. His messengers called together people from a circle of a hundred miles to attend the peace festivals (*Mindari*), to attend his councils or in other matters which were considered to affect the welfare of the tribe. I have often been invited to attend his councils, when they proposed to celebrate any grand ceremony. He possessed wonderful powers of oratory, making his listeners believe anything he suggested, and at all times ready to execute his commands. His disposition was not naturally cruel or treacherous, as was that of many of the Dieri, but he was when not excited, kind, considerate, patient, and very hospitable. I never saw anything low or mean in him. As a rule the Dieri being separated from all but their own relations, speak ill of each other; but I never heard any one speak of this man *Jalina Piramūrana* but with the greatest respect and even reverence.

"I have often watched him distributing presents to all his personal friends with an evident desire to prevent jealousy. I have seen him put a stop to disputes or fights, even chastising the offenders and not infrequently being himself wounded in so doing. On such an occasion there would be great lamentation, and the person who had inflicted the wound on him would usually be beaten.

"He was one of the greatest of the *Kūnkis*,³ but would not practice his art for their benefit excepting on persons of note,

¹ I have observed that in counting the *Yantruwunta* used "*marapo*" as any indefinite number beyond "*mandro-mandro*" = four.

² See p. 76.

³ As to *Kunki*, see p. 87.

his personal friends, or the heads of his totems. He rendered great service to me while I was stationed in his tribe."

Jalina Piramurana was the son of the previous headman, who was still living when I knew the Dieri, and was a very strong-looking man above sixty years of age, too infirm to join any of the ceremonies, but who gave advice and often boasted to me that he had the command of the tribe before his son acquired it. He was supposed to be proof again magic spells.¹

It is in the power of the headman to give away young women in marriage or as "Pirauru." I have known cases where a couple could not agree together, and the headman seeing this, after a reprimanding, separated them, giving the young woman to another man and providing another wife for the husband.

Besides the headman of the whole tribe there was also a headman of each murdu (totem), whose power and authority were restricted to it. Jalina Piramurana was the headman of the Kunaura Murdu,² and I have heard him boast of being the "Family of life"—"the stay of life."

Besides the men who were the heads of totems, there were other old men who were the headmen of the various hordes of which I have spoken elsewhere.³ These were the oldest men at each place. The same man, as already explained, might be both head of his totem, and head of the horde. The headman of the horde was spoken of as "Father." This Jalina Piramurana was the headman of his totem, but he was also the headman of the whole local organization. In connection with the question as to the existence of recognized authority among the Australian blacks, the fact is especially valuable that Jalina periodically visited the various hordes of the Dieri, and that they sent to him periodical presents which were acknowledged by him in person or by deputy. Such presents were even sent to him from a distance of three hundred miles by tribes beyond the Dieri boundaries, being passed on from tribe to tribe.

To the southward of the true Dieri country and including the northern terminations of the great range of mountains which extends from Spencer's Gulf and ends in the Freeling Heights, there was a community of blacks which were nearly related to the Dieri, and whose country has been included on the map (Plate I) with that of the Dieri. Mr. Frank James, formerly of

¹ Mākūeli dūkana, see p. 90.

² Kunaura is the seed of the *Portulacca oleracea*, which at times forms the principal source of vegetable food to these tribes. The seed is ground and made into a kind of porridge and eaten raw, or cooked in the ashes as a cake. Thus cooked its taste reminded me of linseed cake. I have heard this man spoken of as the head of the Manyura totem, that is to say, of the plant itself.

³ See p. 35.

Blanchewater and now an officer in the Victorian Police, in writing to me on the subject of the Dieri, says as follows:—

“There was a black at Blanchewater known as Pompey, a notorious enemy of the settlement of the country by the whites. He belonged to the adjacent Hill blacks, but had fled from his tribe in consequence of his being concerned in the murder of two white men, for hut-burning, and other matters. He ultimately became an influential man in the Blanchewater section of the Dieri tribe. The whites looked upon him as the chief of the Blanchewater blacks, but he only had influence with them through his superior intelligence, and had not any assured position in the tribe.”

Referring to this statement which, with all other information relating to the Dieri tribe, I submitted to Mr. Gason for confirmation, that gentleman says:—

“I personally knew the notorious Pompey, whose true name was ‘Jinabuthina,’ who defied the white inhabitants. He was the supreme headman of the Hill tribe, and was recognized as such, but had no influence with the Dieri. The end of Pompey was that he was shot at a place called Umberatuna by the settlers immediately after he had at the head of about eighty warriors attacked the native camp at that station, killed two friendly blacks, and had threatened the life of the wife of a shepherd. This Pompey had committed many murders and other daring atrocities before he was killed. He was of a very different disposition to Jalina, the Dieri headman, for he was a cruel, remorseless wretch without any feelings of pity. I do not think he had one redeeming feature, unless it might be that looking at him from the standpoint of the natives he was a good fighter. Yet he lacked courage when his life was in danger. He was a good leader and had great influence over his tribe, through his oratorical ability and his supposed power of casting Mukueli dukana.¹

“He had three wives equally ferocious and cruel with himself, a terror to the other women of the tribe, who dared not cross them in word or deed.

“These three women, at the head of a party of other women, were very frequently sent as ambassadors to the heart of the Dieri country, loaded with presents of skins of wallaby, emu, and kangaroo for presentation to Jalina, the great headman of the Dieri. These presents were either friendly offerings or sent to settle some matter of difficulty between the tribes. Pompey only so far as I know went once into the heart of the Dieri country. After his death Jalina often spoke to me about him, and said

¹ See p. 90.

that he had much to thank him for in his position as headman, for Pompey had attended him as an orator and had aided him as a man who was an adept with the shield; but he condemned him for his cruelties to the Yandrawontha tribe."¹

Before speaking of the council of the tribe, I may note that the distinguished men, the warriors, orators, heads of totems, heads of hordes, wore each a circlet of red feathers on their heads as a sign of their position. I do not remember to have seen this in the other tribes, but among the Dieri only.

These men form an inner council within, and distinguished from the general council of the tribe, which is composed of all the initiated men—that is to say, no man has the right of being present at this general council unless he has passed through all the different ceremonies, circumcision, and finally Mindari.²

All the younger men look forward for years to pass through the Mindari ceremony so that they may have the honour of appearing at and eventually the right of speaking in the "great council," as they call it.

Whenever these councils are to be held, men are summoned together by some noted old man nominated for that purpose by the headman.

If it be an important subject that has to be considered, the headman introduces the object of the meeting, and it depends upon him whether the others speak. He adheres to the ancient customs, and if all are agreed the council separates. If they do not agree, the council is adjourned to another time. Everything concerning the council is kept a profound secret from those who have not the right to be present. For over two years Mr. Gason was unable to obtain permission to enter or to see the secret council and its ceremonies. He sought permission in the usual broken English, spoken to blacks by the whites. He tried intimidation, and he had recourse to presents, but it was only when he acquired a command of the Dieri tongue and manners that he was permitted to be present. It was said that Kuchi³ must have instructed him, and as he worked upon their superstitions by favouring this idea, the Dieri at length permitted him to attend their council, and to assist at their ceremonies, until at length he was accepted as a fully initiated man and

¹ The Yantruwunta, as I know the pronunciation. The difference is probably due to Mr. Gason speaking Dieri. The sound of the "th" is not to my ear quite that of our English "the," but more that of "dh." I do not know what these cruelties were, but probably some massacre of the outlying Yantruwunta, who occupied country on the western side of the Grey Ranges, a long narrow strip of country on the eastern borders of that of the tribe (Murdula) of which Pompey was the headman.

² See p. 84.

³ See p. 87.

even was consulted when any great ceremony was about to take place.

I think it will be well to quote Mr. Gason's own words as to the proceedings of the tribal council when he was present:—

"I have frequently attended by invitation at these councils. On one occasion they gave me permission to speak, and I was thus able to save the life of a man who was being charged with having caused the death of another person. I pointed out that he was at a great distance away from the scene of the death. Two of the members of the council also dared to speak in favour of their friend the accused, and they afterwards made me presents of several bags and weapons for my advocacy of him. Three years after, however, he was cruelly killed by order of the council for an offence which he had not committed, but with which his enemies charged him.

"After the principal headman has spoken, the heads of totems address the assembly. The manner of speaking is a repetition of broken sentences uttered in an excited manner, at times almost frenzied. Those who coincide with the speaker, repeat his sentences in a loud voice, but no one comments on what he says until his turn comes to speak.

"The council always breaks up peacefully, but quarrels sometimes follow it, although the camp is not allowed to know the real cause of disagreement, for the secrets of the council are always kept as sacredly as those of a Masonic lodge. The greatest cruelties are threatened to any one of the council who should divulge its secrets, which are many. I have never heard the younger men or the women drop a word which could convey the idea that anything had been communicated to them.

"I have often been cautioned not to divulge what I had there heard and seen, nor to repeat any words uttered there to strangers until these had convinced me by ocular demonstration that they had passed through the ceremony of Kurawali wonkana."¹

Mr. Gason has spoken of the manner in which the tribal council deals with offences. These would be *inter alia* doing to death by witchcraft, for instance, by means of the "bone" or *Mukueli dukana*, murder, breach of the tribal code of morals,

¹ I remember one of the Yerawaka tribe pointing out to me mysteriously the proof that he had undergone this ceremony. But at the time I knew so little of the language that I could not gather the meaning of the speech. The extreme secrecy observed by the Dieri as to the proceedings of their council of initiated men is paralleled, as I have seen by the coast Murring and Kurnai as to their secret councils on the subject of their ceremonies. I was most forcibly struck by this in these two tribes, which have been completely broken by our civilization. The superficial veneer, which contact with us has given them, hides but does not obliterate their deeply-rooted customs.

offences against tribal custom, and revealing the secrets of the council and of the initiations to the uninitiated or to women.

Offences against the moral code of the tribe would be intercourse with a woman of the same class, or who was too nearly related. Interference with the wives of other men would be merely matters to be revenged by the injured husband by a fight or by the kindred. For instance, if a man desired to obtain a particular woman for a wife, and she being refused to him, he eloped with her, her kindred would make up a party and pursue them. On overtaking them the kindred would take her from him, not necessarily with violence, but if he refused he would be severely dealt with. The prohibition against a man taking a woman of the same class as himself to wife would also prevent him from keeping such a woman should he capture her in warfare, and if he attempted to do so it would be strongly objected to. But he might avoid this by exchanging for some other eligible woman.

Yet this rule which prohibits intercourse with women of the same totem is, according to Mr. Gason, relaxed on the occasion when a mission from another tribe is entertained by the Dieri, or when a neighbouring tribe entertains one sent by them. At such times the prohibition between the totems is relaxed, and there is a time of general license even between those of the same totem, always provided that they be not within the prohibited degrees of kinship.

Cases have occurred within Mr. Gason's knowledge when this law has been broken through threats by some man towards a woman too nearly related to him, and where the woman did not dare to complain, fearing to be charged with having been a consenting party, for it is one of the most serious offences known to the Dieri. To call anyone, man or woman, *Buyulu parchana*¹ is almost the greatest offence that can be offered to a Dieri. It implies that the person is without shame, and disregards the prohibitions which restrain certain relations from each other.

At a council which Mr. Gason attended, at which a young man was charged with having transgressed this law with his *ngatata*, that is to say, the daughter of his mother's sister,²

¹ *Būyūlū* = near relation, *pārchanā* = all. The relations of a person are either near or remote. The former are *buyulu*, the latter *wowitcha*. The former includes father, father's brother, mother, mother's sister, son, daughter, brother, sister, brother's child, sister's child. The latter includes, for instance, father's brother's wife, mother's sister's husband, husband's mother's son, and husband's sister's son. These remarks apply to the other tribes herein dealt with, as well as to the Dieri.

² According to the Dieri system of relationship, a daughter of the mother's sister is *ngatata* = younger sister, the "mother's sister" being herself younger than the "mother."

the council inquired into the matter, and finding the charge to be true, the young man was severely punished, indeed almost killed. Indeed he would have been put to death had not some of the influential people in the tribe interfered on his behalf on the ground that he was only a poor idiot who was not accountable for his actions.

It may be mentioned here that the old men in their leisure hours instruct the younger ones in the laws of the tribe, impressing on them modesty and propriety of conduct as they understand it, and pointing out to them the heinousness of incest. The old women also instruct the younger women in this manner.

An instance of what seems to have been the punishment of an offence against the tribe came partly under my own knowledge. On my second expedition I had with me one of the Blanchewater Dieri, and he accompanied me through the country of his tribe northward as far as the Diamantina River, about where Birdville is now situated. He then ran away and made his way back alone to his own people, where I afterwards saw him on my return to the settlements. Some time after I left I learnt from Mr. Frank James that my guide had been killed by an armed party, which chased him for some nine miles before he was overtaken and killed; the reason given for this being that he had been too familiar with the white men and had served them as a guide.

§ 7. *Messengers, Embassies, Expeditions, the Pinya.*

The Dieri do not use the "message stick," but send messages by word of mouth only. It is not necessary with them as with some tribes, *e.g.*, the Wirajuri of New South Wales, that certain messages, as, for instance, those relating to the initiation ceremonies, should be carried by a man of the same totem as the sender.

Messengers were sent to gather people together for dances from distances even up to one hundred miles. Such messengers were painted with red ochre and wore a headdress of feathers.

In calling people together for the ceremonies of Willyaru or Mindari the messengers were painted with diagonal stripes of yellow ochre, and had their beards tied tightly into a point. They carried a token shaped like a Prince of Wales' feather and made of emu feathers tied tightly with string. The sending of a handful of red ochre tied up in a small bundle signifies the great Mindari or peace festival. In giving notice of the intention to "make some young men," the messenger takes a handful of charcoal and places a piece in the mouth of each person

present without saying a word. This is fully understood to mean the "making of young men" at the Willyaru ceremony.

Any tokens used to give notice of matters relating to the initiation ceremonies are not allowed to be shown to or made known to women, girls, or boys.

According to Mr. Vogelsang messengers sent to form a Pinya to avenge a death wear a kind of net on the head and a white frontlet in which is stuck a feather. The messenger is painted with yellow ochre and pipeclay, and bears a bunch of emu feathers stuck in his girdle at the back—at the spine. He carries part of the deceased's beard or some balls of pipeclay from the head of one of those mourning for him. These are shown at the destination of the messenger and are at once understood.

Mr. Vogelsang gave me an instance which illustrates this practice. The Pinya was to avenge a death, and the messenger was sent from Kopperamana to a place called Saltcreek. He carried with him a small net called "Yamma." On arriving at his destination and the old men being assembled, he would produce the net in silence, and those present would understand without anything being said that a Pinya was to be made up.

A messenger who is sent to convey the intelligence of a death is smeared all over with white clay. On his approach to the camp the women all commence screaming and crying most passionately. After a time the particulars of the death are made known to the camp. The near relations and friends then only weep. Old men even cry bitterly, and their friends comfort them as if they were children. On the following day the near relations dress in mourning by smearing themselves over with white clay. Widows and widowers are prohibited by custom from uttering a word until the clay has worn off, however long it may remain on them. They do not, however, rub it off, as doing so would be considered a bad omen. It must absolutely wear off of itself. During this period they communicate by means of gesture language.

If the message is to call together a meeting of the elder men of the tribe the messenger would be some noted old man nominated by the headman who sent the message. The same would be the case when neighbouring tribes are invited to attend the ceremonies of initiation. But in any other matters which might be attended by danger or where there was fear of treachery it was not men who were sent but women.

Perhaps the most important messages which were sent by the Dieri are such to neighbouring tribes relating to disputes between them. For such purposes women were chosen, and if possible, those women who belonged to the tribe to which the embassy,

if it may be so spoken of, was sent. Women were chosen for these messages because they would not be treacherously made away with as might be the case with men.

The women sent were usually the wives of heads of totems, and occasionally one of the wives of the principal headman was sent.

The women were accompanied by their *piraurus*, for it was considered by the Dieri that on such missions a man would be more complaisant as to the acts of his *pirauru* than he would be as to those of his *Noa*. For in these missions it is thoroughly understood that the women are to use every influence in their power to obtain a successful issue for their mission, and are therefore free of their favours.

If the mission is successful there is a time of license between its members and the tribe or part of a tribe to which it has been sent. This is always the case, and if the Dieri women failed in it it would be at the risk of death on their return. This promiscuity is not regarded with any jealousy by the women of the tribe to which the mission is sent, but as a matter of course. They know of it but do not see it, as it occurs at a place apart from their camp.

The members of the mission are treated as distinguished guests. Food is provided for them by their hosts, and on their return home after about a week's stay they are loaded with presents. If the mission is unsuccessful the women are sent back bearing messages of dreadful threats.

The mode of announcing a mission, whether by male or female messengers, is by telling it to the headman of the camp alone in a quiet manner immediately on the arrival of the messengers. Nothing is then said further to anyone, but when all are in the camp about the time for retiring to rest, the headman announces their arrival and the object of their mission. There is then an excited discussion upon it, if it be some matter of moment or of general interest, for an hour or two. It is resumed again at break of day, and so on night and morning from day to day until some definite determination is arrived at.

The arguments of the different old men who speak are well noted by the messengers, who, on their return, repeat as nearly as possible the popular sentiments in the tribe they had visited.

Mr. Gason says that he has on several occasions been present on the return of such a mission which had been entrusted to women. The headman and the principal old men received the woman kindly and congratulated them upon their safe return, but Mr. Gason remarks that the headman had an anxious

appearance, and that the old men clutched their spears in an excited manner. No one but the headman spoke to the women on their first return, but on all being seated and after a little while, the old men questioned the women as to the success of their mission. The result was at once told to all the people there camped, who rejoiced if the mission had been successful, but became fearfully excited if it had failed, and seemed to lose all control over themselves, rushing, yelling to and fro, throwing up sand into the air, biting themselves and brandishing their weapons in the wildest manner imaginable.

In cases where the mission was successful women of the other tribe accompanied it back to testify the approval of their tribe of the treaty arrived at.

Such treaties are probably observed quite as faithfully as many treaties more formally made by civilized peoples. During my explorations north of Cooper's Creek, an attempt was made by some of the Yerawaka tribe to surprise my camp at night. As I was most desirous of keeping on friendly terms with these people, I next day went to their camp with a black boy who spoke their language, and I there cautioned the old men against in any way molesting us. I told them I had no desire to molest them, but that if I found any of them near my camp after dark I should shoot them without further notice. The old men were inclined to treat the matter as a joke, but after some further conversation the old men agreed that none of their people should come near our camps at night, and that when doing so in the daytime they were to lay down their arms at a little distance. On my part I promised to do them no hurt in any manner. This agreement was kept by them, and I observed that not only they, but their neighbours also, laid down their weapons when visiting my camp.

As the Dieri send missions to the surrounding tribes so do these when occasion requires it and then the proceedings are such as have been detailed.

It may be here noted that a Dieri [if of no note or influence, arriving at a camp after a considerable absence, takes his seat near the camp without saying anything. After remaining silent a few minutes, the old men alone gather round him and ask him where he comes from and what has befallen him. He then unfolds all his news and often does not fail to embellish. Then two old men stand up, one retailing it and the other repeating the sentences in an excited manner. The new-comer, if he is a stranger, is hospitably entertained.]¹

¹ In writing to me many years ago, the Rev. H. Vogelsang said of the Dieri: "The question *Mina Murdu*? relates to eating and hospitality. For instance, blacks from a distance arrive here (*Kopperawana*), and the question is asked

I remember being one night near to a small "mob" of friendly Yerawaka some distance to the north of Cooper's Creek, and only separated from their encampment by a rather narrow, though deep water channel. I could watch all their movements by the light of their fires, and hear what was spoken in a loud tone. The evening was spent in great feasting by them. A stranger had arrived from the south, probably, as I now see, a Dieri, and his news was retailed in a loud tone to the people of the camp, and as I now remember it it seemed to me to have gone on for hours. The women were busy till late at night preparing food by pounding and grinding seeds of the Nardoo and Manyura. My black boy, who listened with great interest to the speeches, told me that this man was a "walkabout black fellow," in other words a messenger who had arrived from the south and was telling them the news.

[A man of influence arriving at one of the camps of his own tribe is received by the inmates with raised weapons as if in defiance. Upon this the visitor rushes at them, making believe as if to strike them, they warding off his feints with their shields. Immediately after they embrace him, and lead him to his camp, where the women shortly after bring him food. If he visits a neighbouring tribe he is received in the same manner.]

I observed with much interest during my explorations south of Sturts Desert, and in the Yerawaka country, how my party was ceremoniously announced by one of the Yantruwunta tribe who accompanied me, and so to say accredited us. On arriving within shouting distance of the camp, the guide halted us, and breaking off a branch of a tree or of a bush, went forward somewhat nearer to the group of old men who had come from their camp towards us. The guide, waving the branch, shouted out that we were travelling peaceably. Some conversation upon this took place in a loud tone of voice between him and one of the old men. Matters having been thus satisfactorily arranged, the old men came forward and conducted us to a place adjoining the water where we were to make our camp, facing their encampment. They then sent some of the younger men to gather wood for us.

On this trip I was taken by Yerawaka guides obtained near this place from camp to camp, through a great part of the tribe round by Lake Lipson in the most friendly manner.

If visitors are expected, and it is thought that they may not know exactly where the camp is, smoke signals are used. These

Mina Murdu? meaning 'What are you?'—Bird, Kangaroo, Rat, Mouse, as the case may be. All those of the same name live then in the same huts, eat together, live together, and even lend each other their women."

are also used to call attention of distant parties with whom the smoke-maker wishes to communicate.

I observed such smokes as these when out in the Yandairunga country south-west of Lake Eyre, which then, in the year 1857, had not long been discovered by Stuart. Almost daily I observed columns of smoke rising from the flat-topped ranges common there. These signals were, I then thought, made to attract attention of other Yandairunga to the strangers travelling in their country.

The Dieri also sent out periodically parties, consisting exclusively of men, for various purposes. All the tribes in this part of Central Australia, and indeed far beyond it, use as a narcotic the dried twigs of the pitcheri bush.¹

The Dieri sent an expedition of able-bodied men annually to the pitcheri country on the Herbert River in Queensland, a distance of some 250 miles. This party has to pass through several hostile tribes on its journey, and must fight its way if necessary. On arriving at the pitcheri country, the leaves and small twigs of the bush are carefully picked off. Small holes two feet deep are dug in the sand, and heated with live coals. The pitcheri is then put in the holes after they have been cleaned out and is covered up with hot sand and baked. When the sap has been evaporated the pitcheri is taken out and packed up neatly in netted bags and small wallaby skins, each man carrying about 70 lbs. weight.

Great preparations are made by the Dieri tribe for the return of their pitcheri expeditions. New huts are made, seeds of the season are stored up² for their fathers, brothers, husbands and friends: When the expedition returns its members are full of strange stories of the battles they have fought, of tribes they have seen, who have toes on their feet behind as well as in front,³ and all kinds of wild and extravagant reports. There is great rejoicing over the safe return of the party. The pitcheri, although brought from so great a distance, and obtained under such great difficulties, is all gone after a few months, being bartered away to the more southern tribes.⁴

¹ *Duhoisea Patersoni* (Lind).

² At Lake Lipson I observed hampers made of twisted grass, daubed inside with clay, used for containing about half a bushel of the seed of the Manyura (*Portulacca oleracea*).

³ *Tidna-munka-munka*. I suspect that these tales refer to those more northern or north-western tribes who use a kind of sandal, made, I believe, of emu feathers, thus not leaving any, or scarcely any, track.

⁴ A system of barter spread all over the interior of the continent. The Dieri bartered weapons with their southern neighbours for the skins of kangaroos; and with northern and eastern tribes for their shields. Ornamental belts were also exchanged, and I once observed the single valve of a large marine shell, which must have been passed on from tribe to tribe, probably from the northern coast.

Mr. Gason tells me that when the Dieri expedition returned he used to obtain as much as six bags, weighing each three pounds, for one shirt. As soon as the pitcheri became scarce, the leading men would come to him bringing all kinds of weapons as presents for a small quantity, begging him to give them "one little chew"—*pitcheri waka jinkeami*.

I found the use of pitcheri very common with the Yantruwunta at Cooper's Creek. I had frequently a quid of pitcheri offered me fresh from the mouth of a friendly black fellow, and I have obtained it in an unchewed state done up in small closely netted bags made of grass twine and human hair. The Yantruwunta told me that they travelled about ten days' journey, and they pointed to the north-west as the direction. This might give a distance of from 150 to 200 miles, and would roughly agree with the position of what is now known as the 'Pitcheri country.' The Yantruwunta mixed their pitcheri with the dried leaves of a bush called by them "Wira," which grows plentifully on the sand hills in parts of their country. The Wira is prepared by breaking off small twigs and drying them in the hot ashes. They are then broken up and mixed with the pitcheri for chewing. The use of pitcheri was known not only to the Cooper's Creek tribes but also as far as least as the Barrier Ranges in New South Wales.

In July or August in each year the Dieri also sent out another expedition southwards to procure red ochre. This was always regarded as being a perilous expedition accompanied by many dangers and privations. The party had to travel three hundred miles and back, through the country of hostile tribes, keeping strict watch every night and having to procure their food as they travelled, and on their return journey each man carried from 60 to 100 lbs. weight of artificially made up red ochre. The men were all picked, and the expedition was under the guidance of some great leader. The men were marked each with three stripes of red ochre and with three black ones of micaceous iron ore immediately under the former across the abdomen. Two marks of the same were drawn across the arms. Each man had all the hair of his beard and moustache plucked out and the hair of his head cut short before he started.

Mr. Frank James tells me, speaking of the Blanchewater section of the Dieri tribe, that the annual expedition down the western plains for red ochre was one of the most important duties of the tribe. Some seventy or eighty of the pick of the fighting men went on this trip, all well armed, and they fought with and killed all the blacks who dared to oppose them. The ochre was kneaded into large cakes and was carried back for use as

war paint, for charms, &c., and it was one of the principal articles they gave in exchange to the other tribes beyond them for spears, shields, and other weapons.

The Yantruwunta gave me a similar account of their annual expedition to fetch red ochre, but also for the slabs of sandstone on which they grind their seeds for food. The locality to which they resorted for these things must have been, to judge by their statements, far down on the western side of the Flinders Range; the distance must have been over three hundred miles. They told me that the party could not stop two days in any one place on the journey, but had to fight its way there and back, and to hunt for food as well. The flagstones used for grinding seed upon were procured somewhere near to the red ochre mine. Each man carried back either a slab of sandstone or a lump of ochre on his head.

A third party which the Dieri sent out was the dreaded Pinya. It was the avenger of the dead, of those who were believed to have been done to death by sorcery, such as the "bone." I have already said something of it when speaking of the manner in which messages are delivered.

The appearance at a camp of one or more men, marked each with a white band round the head, with diagonal white and red stripes across the breast and stomach, and with the point of the beard tied up and tipped with human hair, is the sign of a Pinya being about. These men do not converse on ordinary matters, and their appearance is a warning to the camp to listen attentively and to reply truly to such questions as may be put concerning the whereabouts of the condemned man. Knowing the remorseless spirit of the Pinya, any and every question is answered in terror.

I have no direct evidence of the Pinya having been in force at Cooper's Creek, but I think it almost certain that it was. The tribes there were intimately connected with the Dieri, and their language and customs generally were the same. Moreover I remember meeting men there painted and with their beards tied up, as described to me by Mr. Gason.

There is a curious custom among the Dieri which may find its record in this section. It is called Yŭtchin. When a black fellow is going to a distance from home either to one of the hordes or the lesser divisions, or to a neighbouring tribe, some one at his camp becomes his Yŭtchin. This is done by placing a string of human hair or of native flax round his neck to remind him of his promise to bring back presents. It then becomes his duty to bring back with him articles for his Yŭtchin, who, while he is away, also collects presents for him. Under no circumstances is such a pledge broken, for if a person failed in it he would

have all the men in the camp at him, and he would be called and considered an untrustworthy man. Mr. Gason tells me that he has often been the Yŭtchin of some Dieri men, giving them old wearing apparel, and receiving from them in return carved weapons and ornamental articles. This practice is used for bartering. For instance, if a man saw a carved boomerang which he desired, he would say to the owner of it, "I will give you such and such things for it if you will be my Yŭtchin." If they agree they become Yŭtchin, and the one man, after some trip to an outside camp of the tribe or elsewhere, returns with the things bargained for, hands them over, and the exchange is made. When people see a Dieri man or woman with a string about his or her neck it is said, "For whom are you Yŭtchin?" A son may be Yŭtchin for his father; for instance, a father may promise to make some boomerangs for his sons while they are out hunting for him. Whatever they catch, no matter how much it is, they on their return hand to him, and the women flock round to see what kind of Yŭtchin the boys have been. The boomerangs are, of course, made and handed over at once. Mr. Gason has seen little boys of from seven to ten years of age coaxing their father to make them boomerangs, promising to be his Yŭtchin.

Mr. Gason always had several Yŭtchin, and when he heard of blacks about to visit a neighbouring tribe he sent for them, and giving them presents, they would request him to place a cord round the neck of each, as Yŭtchin. On their return they brought him presents in return, such as carved weapons, ornamental bags, &c.

§ 8. *Initiation Ceremonies.*

The initiation ceremonies of the Dieri tribe, as will be seen from the following account, which is compiled from Mr. Gason's communications, differ very materially in detail from those of more eastern tribes of which the Kuringal of the Coast Murring, elsewhere described by me,¹ may be taken as an example. The Dieri ceremonies are typical of those of the kindred tribes which are referred to in this memoir, and I find that they even extend, in a modified form, while still retaining the blood-letting ceremony under its name of Wilyaru, to the Adajadŭra tribe of Yorks Peninsula. So far as I am aware at present the peculiar rite which, to use the Dieri term, may be called Kŭlpi, seems to be confined to such tribes as practice circumcision. If, there-

¹ "On some Australian Ceremonies of Initiation," "Journ. Anthropol. Inst.," May, 1884, vol. xiii, p. 432.

fore, a line be drawn from the Murray mouth northwards to the Gulf of Carpentaria, it will roughly denote the boundary between the two types of initiations. To the west of this line circumcision and Kūlpi are found; while to the east of it initiation ceremonies of the Kuringal (Bora) type prevail. It must be understood, however, that this line is no more than a rough approximation, and that either type may be found in places within the general limits of the other.

It is the principal headman (Pina Pinaru) of the tribe who decides when youths shall be passed through the various stages of the initiation ceremonies. That is to say, he decides upon the time when he finds that there are a sufficient number ready. The matter is, of course, brought by him before the Great Council, but he decides so far as concerns the time and place and as to which youths are to be initiated.

The knocking out of teeth, as practised in this tribe, is performed at an earlier period than in tribes having the Bora ceremonies; that is to say, at an earlier period in the course of initiation, and is not confined only to the boys.

[When a child is from eight to twelve years of age the two front teeth of the upper jaw are taken out in the following manner:—Two pieces of the Cooya Mura tree, each about a foot long, are sharpened at one end to a wedge-like shape, then placed on either side of the tooth to be extracted, and driven in tightly. A piece of wallaby skin folded two or three times is then placed against the tooth. A piece of wood, about two feet long, is placed against the wallaby skin and struck with a heavy stone. Two blows suffice to loosen the tooth, which is then pulled out by the hand. This operation is repeated on the second tooth. As soon as the teeth are extracted a piece of damp clay is placed in the holes to stop bleeding. The boy or girl, as the case may be, is forbidden during the ceremony, or for three days after, to look at the men who were present, but whose faces were turned from them. It is thought that a breach of this rule would cause children's mouths to close up, and consequently that they would not be able to eat afterwards. The teeth drawn are placed in the centre of a bunch of emu feathers, smeared with fat, and are kept for about twelve months under the belief that if thrown away the eaglehawk would cause larger ones to grow in their place, to turn up over the upper lip, and cause death.]

The teeth being carefully wrapped up with emu feathers are kept by the boy's father, or the nearest relatives, until the mouth is completely healed, and even for long afterwards, when the father, accompanied by a few old men, not necessarily men of consequence, dispose of them as follows:—The father makes a

low rumbling noise, not using any words, blows two or three times with his mouth, and jerks the teeth through his hand to some little distance. He then buries them about eighteen inches under the ground. The jerking movement is intended to show that he has thereby taken all the life out of them, as should he fail to do so the boy would be liable to an ulcerated mouth, impediment in speech, a wry mouth, and ultimately a distorted face.

A belief is here shown in an intimate connection between the teeth and the person from whom they were extracted when even at a distance, and after a considerable lapse of time. Such a belief is not peculiar to the Dieri. The Murring also hold it. When I returned from the Kuringal of that tribe, which I have elsewhere described, I took with me, in the character of the headman who had caused the ceremonies to be held, the teeth which had been knocked out. In the proper course of events it would have been my duty to hand them to one of the other headmen, who would then again send them on, until having made the round of the whole district from which the people who attended the ceremonies had come, the teeth would ultimately return to their former possessor and be retained by him.

Nearly twelve months after my return one of the principal Murring men came to me, having travelled some 300 miles from his home on the southern coast of New South Wales. His errand was to fetch back the teeth, and he explained that he had been sent for them because one of the boys had fallen into ill-health, and it was believed that the teeth had received some injury and had affected him. He received the teeth from me with an assurance that they had been placed in a box apart from any substances, such as "quartz crystals," which could influence them. He returned home, bearing the teeth with him carefully wrapped up and concealed.

Kūrawéli-wónkana,¹ or the ceremony of circumcision, is performed when a boy is about nine or ten years of age. The public proceedings are commenced by a woman walking up to a youth in the early part of the evening and quietly slipping a string made of human hair over his head, to which is attached a mussel shell (Kūri). This woman is a married woman, not of his totem or class or in any way related to him. This is usually the commencement of a row. Neither the boy nor his father have been previously made aware of what is intended. Directly the boy finds the shell suspended round his neck he jumps up and runs out of the camp. His father becomes

¹ Kūrawéli = boy; wónkana = singing.

enraged, for it is generally the case that fathers think their sons too young to undergo the painful operation. Becoming enraged he attacks the elders and a general fight results.

From the moment the boy rushes out of the camp until several months after the circumcision, excepting the night immediately before the ceremony, no woman is supposed to have a sight of him. The night before the circumcision all the women see him for a few minutes only.

At this time all the available tribespeople are collected, and, as has been stated at p. 56, there is for the time unrestricted intercourse between those who are *pirauru* to each other. Afterwards this gives rise to many bloody quarrels, but they dare not speak of what is done at the *Kuraweli-wonkana*, fearing severe punishment for trying to undermine and tamper with their established rules. [Immediately before the boy is circumcised a young man picks up a handful of sand and sprinkles it as he runs round the camp. This is supposed to drive out *Kuchi* and to keep *Muramura* in.

As soon as the circumcision has taken place the father of the boy stoops over him, and fancying himself inspired by *Muramura*, gives him a new name. He is then taken away by some young men and kept away for several months.

The next ceremony after circumcision is that called *Wilyaru*. A young man without previous warning is led out of the camp by the old men. On the succeeding morning the men, old and young, except his father and elder brothers, surround him, directing him to close his eyes. One of the old men then binds the arm of another old man pretty tightly with string, and with a sharp piece of flint lances the vein about an inch from the elbow, causing an instant stream of blood, which is allowed to play over the young man until he is covered with it, and the old man is exhausted. Another then takes his place, and so on until the young man becomes quite stiff from the quantity of blood adhering to him.] The reason given for this practice is that it infuses courage into the young man, and also shows him that the sight of blood is nothing, so that should he receive a wound in warfare he may account it as a matter of no moment. The next stage in the ceremony is that [the young man is told to lie down on his face, when one or two young men cut from three to twelve gashes on the nape of his neck with a sharp piece of flint.] These, when healed into raised scars, denote that the person bearing them has passed through the *Wilyaru*. Should you ask a *Dieri* whether he is *Wilyaru* he will point with pride to the scars on his neck. Until the scars are healed the youth must not turn his face to a female, nor eat in the sight of one.

Immediately after the ceremony of Wilyaru a wooden instrument is given to the youth. It is called "Yūntha," and is from 6 to 9 inches long, $\frac{1}{16}$ inch thick, and from 2 to $2\frac{1}{2}$ inches wide. It has notches at each side.¹ It has a small hole at one end, to which is attached a string about 10 to 12 feet long, made either of native flax or human hair. On the Yuntha being whirled round the head it makes a loud humming sound.

The Yuntha is never seen by the women, and they do not know what causes the sound made by it. The men tell them that it is Muramura inspiring the young man to make the noise, and that this shows that he is satisfied with the Wilyaru ceremony. It was some time after Mr. Gason was initiated in the Dieri ceremonies that the Yuntha was shown to him, and he was required to promise never to show it to women, or to let them know that he possessed one.

A Yuntha which has been used at the Wilyaru is marked with a number of small notches on the side at one end. If by chance a Yuntha is lost, the finder examines it to see whether it bears any notches; if it has, he carefully secretes it and acquaints the elders of his find. If there are no notches he treats it just as a plain piece of wood, and he may even carry it to the camp and make a joke of it. The Yuntha is one of the most important secrets of the tribe, and the knowledge of it is kept inviolate from the women. The belief is that if the women were to see a Yuntha which had been used at the ceremonies and know the secret of it, the Dieri tribe would ever afterwards be without snakes, lizards, and other such food.

Mr. Gason tells me that when he was initiated he was required to promise that he would keep all their secrets, and never, even by a tracing on the ground, to show the Yuntha to women. When the Yuntha is given to the youth he is instructed that he must twirl it round his head when he is out hunting. The Dieri think that when the Yuntha is handed to the young Wilyaru he becomes inspired by Muramura, and that he has the power by whirling it when he goes out in search of game and before his wounds are healed, to cause a good harvest of lizards, snakes, and other reptiles.

The young man is never seen by the women from the time when he is made Wilyaru until he returns to the camp, after perhaps many months. All the blood which was caused to stream over him has worn off, and the gashes are thoroughly healed before he shows himself at the camp. All his near female relations⁽²⁾ become very anxious about him during the time of his

¹ One in my possession, for which I have to thank Mr. Gason, has plain edges.

² *Buyulu-parchana*. These are those whom the Dieri regard as being too

absence, often enquiring as to his whereabouts. About a week after the ceremony, and at night, he approaches the camp, providing the night is very dark, and there is no moon, and commences twirling the Yuntha, causing a loud noise. When this is heard the men, excepting the elders, go out and visit him, carrying with them food which the women have prepared. They cheer up and encourage the young Wilyaru. He now departs again, accompanied by a few young men who have already been made Wilyaru. They keep him company as he cannot come to the camp, nor may he even be seen by the women until his wounds are healed.

There is a great rejoicing when the Wilyaru finally returns to the camp. He is made much of, especially by his "mothers" and his "sisters,"¹ but he is prohibited from speaking to any of the actual operators in the Wilyaru ceremony until he has given some kind of present to each. As he hands the present to one of the operators he is in return told that he may now speak. This custom is carried out strictly. Mr. Gason says that he never witnessed a Wilyaru ceremony without receiving a present from the youth, and he never could in the case of those who had been through this, or the previously described ceremony, induce one of them to speak until after the present had been given to him.

[After enduring the ordeal of the Wilyaru, the next ceremony he has to go through is that of the Mindari, which is held about once in two years by the Dieri or by the neighbouring tribes. When there are sufficient young men in the tribes who have not passed this ceremony, and each tribe being on friendly terms with the other, a council is held to determine time and place. This being appointed, women are sent to the neighbouring tribes to invite them to the ceremony, the preparations for which, building huts, collecting food, and the arrangements generally occupying from six to seven weeks. Every day witnesses fresh arrivals of men, women, and children, and as soon as the first members of the arriving party come in sight the Mindari song is sung to show the strangers that they are hailed as friends. At length, all having arrived, they wait for the full of the moon so as to have plenty of light during the ceremony, which commences at sunset. Meantime at every sunrise and at intervals all the men in the camp join in the Mindari song.

On the evening of the ceremony the young men are dressed carefully, the hair of the head being tied with string so as to stand straight up, and the tails of rats (Thilpa) are fastened on

nearly related to marry. The term "blood relations," which my correspondents will persist in using, is misleading; "prohibited relations" would be better.

¹ See § 4 on "Relationships."

the top. Feathers of the owl and the emu are fastened to the forehead and ears, and a large Yinka or girdle made of human hair is wound round the waist. The face is painted red and black.

All the men, women, and children now begin to shout with the full force of their lungs for about ten minutes. They then separate, the women going a little way from the camp to dance, while the men proceed to a distance of about 300 yards, the site selected being a plain, generally of hard ground, which is neatly swept. A little boy of about four years of age opens the ceremony, being tricked out all over with down of the swan and wild duck, bearing a bunch of emu feathers on his head and having his face painted red and white. He dances into the ring, the young men following him, and they followed by the old men. The dance is kept up for about ten minutes, when the boy stops the dance by running off the dancing ground.

All the young men then go through many extraordinary evolutions, and this is continued until sunrise, when, all being tired, the ceremony is closed and they retire to sleep during the day.

The reason for holding this ceremony is to enable all the tribes to meet and to amicably settle any dispute that may have arisen since the last Mindari.]

Connected with the initiation ceremonies but evidently not essential as regards all the initiated, is a most remarkable operation to which some are subjected, and which is called by the Dieri Kūlpi.¹ This is a convenient word for this rite, and I shall therefore use it both for the proceeding itself, and also for the person who has been affected by it. I have before said that a line drawn from the Murray mouth to the Gulf of Carpentaria roughly separates the area where circumcision is practised from that where it is not known. The same line will serve to show also the boundaries of the Kulpi practice. I have several accounts from correspondents in the Western half of the Australian Continent giving me a detailed account of this matter, but from no one have I received a more complete account than from Mr. Gason, which is as follows:—

At the secret council at which the circumcision ceremony is determined upon, the headman and the heads of totems fix upon certain youths to become Kulpi, while deciding that other youths shall not be Kulpi. Certain men are nominated to see the decision carried out, and they are responsible to the headman for the proper incision being made, clean, straight, and without any unnecessary violence.

No warning or notice is given to the young man. He goes

¹ Mr. E. M. Curr in his work, "The Australian Race," calls this "the terrible rite."

out on some day hunting with others, who at a certain signal being given by one of the party, suddenly pinion him from behind, and throw him down. The young man naturally struggles most violently, thinking they are about to murder him, and calls out for his father and mother in a most piteous tone,¹ until his mouth is covered over with someone's hands. Other men who have been lying concealed now rush up and tell him not to be frightened, for that they are only going to make a Kulpi of him.

If, however, in spite of this he continues to struggle, they beat him severely on the head to quieten him. As a rule he submits, finding himself in their power and moreover that his life is not in danger. The old men and the bystanders encourage him by saying that he must not mind the pain, for that it is nothing to what he has suffered through circumcision. During the operation, which lasts about twenty minutes, the old men continually cheer him up to keep him steady, but many youths faint after the operation is over.

Mr. Gason mentions one case where a young man struggled most violently during the operation. Large drops of sweat broke out on his forehead, and tears flowed from his eyes; yet he did not utter a sound or a murmur until it was over, when he uttered a deep groan and several deep sighs, and gradually fell back into the arms of the men who were holding him. The wound was stanchd with sand. Mr. Gason lost sight of this young man for about four months. When he again saw him he looked healthy, active, and smart, and the wound was quite healed up. He presented him with a carved boomerang and a few trinkets, making signs to Mr. Gason to accept them. He, knowing the custom in such cases, took them, and it was only then that the youth ceased to be *apū-apū*, or dumb, and spoke to him. For the Kulpi, as is the case with the Kuraweli wonkana, or the Wilyaru, may not speak until he has given presents to those present at the time. It may be many months before a young man is able to meet with all those to whom he is bound to present something as being either operators or witnesses. It is thought that the presence of a distinguished man, such as a warrior, a head of a totem, &c., at the operation tends to give strength to the young man while undergoing it.

It is only when a young man has been made Kulpi that he is considered to be a "thorough man," and in this sense that Kulpi is the highest stage of the initiation ceremonies.

A Kulpi has the privilege, and he alone, of appearing before

¹ The custom of crying out for their father or mother when in pain, or suffering of any kind, is universal with the Dieri. Mr. Gason says that it arises from a feeling of respect and honour for their parents, which is a marked and admirable trait of these people.

the women in a perfectly nude state. It is to the Kulpis that important matters bearing on the welfare of the tribe are entrusted, and they always take precedence of the other men who are not Kulpi. They hold in fact the most important positions, and powerfully influence the government of the tribe.

The headman, Jalina Piramurana, in complimenting a Kulpi on the satisfactory manner in which he had accomplished some mission or matter which had been entrusted to him, was accustomed also to refer to his being a Kulpi.

All men sent on special missions to other tribes are Kulpi. It would never be even thought of to send a non-Kulpi in charge, as he would not carry much weight or have such influence as a Kulpi.

Men often express regret that they were not Kulpi, feeling some jealousy of the superior position of those who are so distinguished, for the Kulpis also take precedence at the grand corroborees, where they are the principal leading dancers and also as "masters of the ceremonies" generally.

The Dieri say, according to Mr. Gason, that the object of the Kulpi operation is "cleanliness," and that without it no one can be a "thorough man."¹

On the young women coming to maturity there is a sort of ceremony called Wilpadrina. At it the elder men have a right to their young women, and exercise it, the other women being cognizant of it, and being present.

§ 9. *Doctors and Wizards.*

The Kunki, or as he is generally called by the whites, the "Doctor," is supposed to have direct communication with two spirits, Kūchi and Mūra Mūra. He interprets dreams and reveals to the relatives of the dead the person by whom the deceased has been killed. If a Dieri has a dream and fancies he has seen a departed friend during the night, he reports the circumstance to the Kunki, probably not omitting to embellish the account. The Kunki perhaps declares that it is a revelation and not a mere dream, and announces it in the camp in an excited speech. For the Dieri distinguish between what they consider a vision and that which is a mere dream. The latter is called Apitcha, and is thought only to be a fancy of the head.

¹ There are many circumstances connected with the Kulpi practice which, although unfit for publication, ought to be placed on record in some way. I have sent some in manuscript to Dr. E. B. Tylor. The Rev. L. Fison informs me that the Kulpi is performed by certain Fijian tribes as a surgical operation in cases of wasting sickness.

The visions are attributed to Kuchi, a powerful malignant spirit who gives to the Kunki his power to produce disease and death, or to heal that which some other Kunki has caused. If the Kunki declares that the sleeper had a real vision of his dead friend, he may order food to be placed for the dead, or a fire to be made so that his spirit may come and warm itself. But it depends much upon the manner in which the interpretation is received by the elders whether the Kunki follows it up. The Kunki also professes to cure disease. Jalina Piramurana was a noted Kunki, as was his father before him, but he would not exercise his power excepting on behalf of persons of note.

On one occasion Mr. Gason caught cold attended by fever. Jalina, hearing that he was ill, sent down to ask permission from the other troopers to "drive Kuchi out of the police camp," before he came to examine Mr. Gason as his patient.

When one of the Dieri dies, whether man, woman, or child, there is always a kind of inquest on the body, as no one is believed to die from natural causes.

The corpse having been tied together and being enveloped in a skin rug [is carried to the grave on the heads of three or four men, and on arrival is placed on its back on the ground for a few minutes. Then some men kneel down near the grave while others place the corpse on their heads. One of the old men, usually the nearest relative, now takes two light rods called "Kūnya," each about three feet long, and holds one in each hand, standing while doing this about two yards from the corpse. Then beating the rods together he questions the deceased as to who was the cause of his death, and asks the name of the person who killed him, for they attribute death to some spell or charm exercised by an enemy. The men sitting round act as interpreters for the defunct, and according as opinion prevails the name of a man of some other tribe is given. When the old man ceases to beat the rods together the men and women round commence crying and the body is removed from the heads of its bearers and is lowered into the grave, in which there is a man not related to the deceased, who proceeds to cut off all the fat adhering to the muscles of the face, thighs, arms, and stomach, and passes it round to be swallowed by some of the near relations in order that "they may not be continually crying about the dead,"] and thus become a nuisance to those in the camp. All those who have eaten of the corpse have a black ring of charcoal powder and fat drawn round the mouth. The legend runs that this was ordered to be done by Mura Mura, and further that this mark should be maintained for two or three days after the death in order that any strangers arriving might

be made aware by this sign of the death, and thus avoid a chance of hurting the feelings of the survivors. This black mark is called "mūna mūrū-mūrū," or "black mouth."

[The order in which the relatives partake of their dead relatives is this. The mother eats of her children, and the children of their mother.] A man eats of his sister's husband and of his brother's wife. Mother's brothers, mother's sisters, sister's children, mother's parents, or daughter's children are also eaten by those to whom the deceased stands in such relation. [But the father does not eat of his children nor do the children eat of their sire.]

When all is completed the grave is filled in and a large stack of wood is placed over it. Invariably after a death the Dieri shift their camp and never after speak of or refer to the defunct.

It is thought that when a person dies the spirit ascends Pūriwilpana, or the sky. It can also roam the earth but cannot become visible, except in visions. Food is placed at the grave for many days, if the dead person was one of influence, and if in the winter months a fire is lighted in order that the ghost may warm itself. The ground round the grave is carefully swept, and Mr. Gason has often heard the Dieri declare that they had seen the tracks of the deceased, although they could not see the spirit itself. Should the food not be touched it is thought that the spirit was not hungry.

They also think that the ghosts can take up their abode in ancient trees and therefore speak with reverence of these trees, and are careful that they shall not be cut down or burned.

The Dieri never wish to die, and consider that they are punished by Mura Mura during life for any offence.

No trinkets, weapons, or decorations are buried with the corpse, which is merely rolled up in any old wrapper which might have been around it when death occurred.¹ For months after a death the near relatives are smeared over with white clay. They are forbidden to speak a word, and if they want anything they ask for it by signs, and if spoken to they reply in the same manner. The women mourn and are speechless much longer than the men. Great sympathy is felt for those who are in mourning, and their friends seeing them thus will often burst out into genuine tears of grief for them.

[As no one is supposed to die from any cause other than the machinations of some one in his own or a neighbouring tribe, so

¹ I was much struck with the almost complete absence of anything like coverings, as for instance skin rugs, among these tribes. The Dieri obtained the skins of wallaby and kangaroo from the hill tribes south of them; but the Yentruwunta and Yerawaka had none. I once saw a pelican skin used as a covering by a very old woman, and this was quite exceptional.

men, women, and children are in constant terror of having offended some one who may therefore bear enmity to them.¹

One of the most common spells which it is supposed can be used is that known as "Mūkūeli dūkana," from Muku=bone, and dukana=to strike. Therefore, so soon as a person becomes ill, there is a consultation to find out who has "given him the bone." If the sick man does not get better, his wife, or if he has not got one, the wife of his nearest relative, accompanied by her pirauru, is ordered to go to the person suspected. This she does, and makes the person a few presents without saying more than that her husband (or so and so) has fallen ill and is not expected to recover. The man knowing by this that he is suspected, usually tells the woman that she can return to her relative, as he will withdraw all power from the bone by steeping it in water. If the sick man dies, and especially if he happens to be a person of importance, the suspected man is certain to be killed.]

This bone is the small one of the human leg. When the tribe desires to kill some one at a distance, Mr. Gason has known the principal men join in pointing these bones wrapped in emu feathers and fat in the direction of the intended victim, and at the same time naming the death they wish him to die.

All present are bound to secrecy, and the incantation lasts about an hour. Should they learn after a time that the man continues alive and well they explain it by saying that some one of his tribe stopped the power of the bone.

The practice of "Rain-making" is in Australian tribes usually in the hands of some of the wizards. I have elsewhere given particulars as to other tribes.² With the Dieri the procedure is somewhat different, and is taken part in by the whole tribe or by some part of the tribe under the guidance and direction of some of the Kunkis or wizards. Mr. Gason has given the following account of the rain-making ceremony :—

The sky is supposed by the Dieri to be a vast plain inhabited by wild savage tribes between whom and the people of the earth there is no connection. Some of the departed inhabitants of this earth are supposed to live up there in hideous forms such as snakes with feet. The Kunkis sometimes relate their midnight wanderings (night-mare) in the sky in the forms of crows, snakes, and other wild fancies. But they do not profess to see these inhabitants of the sky otherwise, or to hold any communication with them.

The sky is called Pūri Wilpanina, or the Vast Hole. The

¹ I think Mr. Gason's statement must be so far modified as to exclude death at the hands of the Pinya.

² "On Australian Medicine Men," &c., "Journ. Anthropol. Inst.," August, 1886, vol. xvi, p. 23.

Milky Way is called Kai-iri, or the Creek, Orion's Belt is the Munkarawa, or the woman, and clusters of small stars are called Munkara Walkawura, or the young women.

The clouds are supposed to be bodies in which rain is made either by the ceremonies of the Dieri or of the neighbouring tribes, through the influence of Mura Mura. The clouds are called Thūlara-paulka, or the body or substance of rain.

In times of severe drought I have witnessed them calling upon Mura Mura to give them power to make a heavy rainfall, crying out in loud voices the impoverished state of their country and the half-starved condition of the tribe in consequence of the difficulty in procuring food in sufficient quantity to sustain life.

During such drought, to which the Dieri country is much subject, the rain-making ceremonies are considered of great consequence, and I have witnessed them many times.

When it has been determined by the Great Council that such a ceremony is to be held [women, accompanied by their Piraurus, are sent off to the various sub-divisions of the tribe to summon the people to attend at some appointed place. When the tribe is gathered together they dig a hole about two feet deep, twelve long, and from eight to ten feet wide. Over this they build a hut of logs, filled in with slighter logs, the building being conical in form and covered with boughs. This hut is only sufficiently large to contain the old men, the younger ones sitting at the entrance or outside. This being completed, the women are called together to look at the hut, which they approach from the rear, then dividing, some one way and some the other, they go round until they reach the entrance, each one looking inside but without speaking. They then return to their camp distant about 500 yards.

Two Kunkis, who are supposed to have received a special inspiration from Mura Mura, are selected to have their arms lanced. These are tightly bound near the shoulders to prevent too profuse an effusion of blood. This being done all the men huddle together in the hut, and the principal Kunki in the tribe takes a sharp flint and bleeds the two men inside the arm below the elbow. The blood is made to flow on the men sitting round, during which the two men throw handfuls of down into the air, some becoming attached to the blood on the men and some floating in the air. The blood is supposed to symbolise the rain, and the down the clouds. During these proceedings two large stones are placed in the centre of the hut. They represent gathering clouds, presaging rain. At this period the women are again called to visit the hut and its inmates, and having seen them again retire.

The main part of the ceremony being now concluded the men who were bled carry the two stones away some ten to fifteen miles and place them as high as they can in the largest tree about. In the meantime the other men gather gypsum, pound it fine, and throw it into a water hole. Mura Mura is supposed to see this and thereupon cause clouds to appear in the sky. Should these not appear so soon as expected, it is accounted for by saying that Mura Mura is angry with them, and should there be no rain for weeks or months after the ceremony it is supposed that some other tribe has stopped their power.]

After the ceremony the hut is thrown down by the men, old and young, butting against it with their heads. The heavier logs which withstand this, are pulled down by all dragging them simultaneously at the bottom, thus causing them to fall. [The piercing of the hut with their head symbolises the piercing of the clouds, and the fall of the hut the fall of the rain.]

In the rare seasons which are too wet, the Dieri also have recourse to supplications to Mura Mura to restrain the rain, and Mr. Gason has seen the old men in a complete state of frenzy, believing that their ceremonies had caused Mura Mura to send too much of it.

The foreskin, which is carefully kept from the Kuraweli ceremony, is also supposed to have a great power of producing rain. The Great Council is always possessed of several of them for use when required. They are kept carefully concealed, wrapped up in feathers with the fat of the wild dog and of the carpet snake. Mr. Gason has seen such a parcel carefully unwrapped. The men watched with cat-like vigilance that no woman should be near, and implored him not to divulge the secret contents of the parcel to them; all the time knowing that no women were nearer than half a mile.

After this ceremony the foreskin is buried, its virtue being exhausted. If no rain follows, the explanation of course is that some neighbouring tribe has influenced Mura Mura not to grant it to them.

During times of partial drought the Dieri do not feel anxiety if they possess one of these foreskins, believing that with its aid they can cause rain to come before long. No matter how Mr. Gason scoffed at this belief they were quite immovable in it, believing that the foreskin has an affinity to the clouds and rain.

After rains have fallen there are always some who undergo the operation called Chinbari, which is cutting the skin of the chest and arms with a sharp piece of flint. The wound, which is through the skin, is then tapped with a flat stick to increase the flow of blood, and red ochre is rubbed in. By this raised

scars are produced. The operation is not very painful, to judge by the patient joking and laughing all the time. The reason given for this practice is that they are pleased with the rain, and that there is a connection between the rain and the scars. Mr. Gason tells me that he has seen little children crowd round the operator, patiently taking their turn and after they have been operated on, run away extending their little chests and singing for the rain to beat on them. However, on the following day they were not so well pleased when their wounds were stiff and sore.

§ 10. *Gesture Language.*

The use of signs instead of speech is common among the Australian blacks, but the signs in most cases are not used to an extent sufficient to justify the expression *Gesture Language*, as applied to them. There are, however, certain tribes who have a complete system of these signs, and who use them habitually to a considerable extent. The Dieri customs, as I have shown in this memoir, made the use of gesture in lieu of words sometimes indispensably necessary; moreover, on many occasions where it is not thus necessary, it is, nevertheless, extremely convenient.

In those tribes as to which I have personal knowledge, I have found great difference in the number and variety of gestures used, and as a recognized means of communicating ideas between one individual and another. It must be premised, however, that there are certain gestures which appear to be almost instinctively used by all people, whether savage or civilized; for instance, the beckoning with the hand towards oneself as meaning "Come here," or the waving of the hand from oneself as meaning "Go away," and so on. Such signs or gestures as these will, I expect, be met with in all tribes, but those to which I refer as being in greater or less use, are what I may perhaps not improperly term "conventional signs;" gestures which have been adopted in lieu of speech, and which have become generally accepted in the tribe or in adjoining tribes as having a definite meaning, which would not be apparent without explanation to a person seeing them for the first time.

The variation in the frequency of use or number of signs can be best shown by three examples. The Kurnai have very few word-signs of any kind, and no gesture language in the sense in which I have above defined it. Among the few signs used by them were these:—

Owing to the disinclination which they feel in common with other Australian savages to name the dead, it was customary

for a messenger conveying news of the decease of a person to do so somewhat in the following manner:—

Arriving at the place, and meeting the person or persons to whom he was sent, and being moreover painted with pipe-clay as an external indication of his errand, he might say thus: "The father (brother, &c., as the case might require) of that one (pointing out some individual present) is —," here he would point with the forefinger either to the ground or to the sky.

This gesture downwards or upwards with the finger was the conventional gesture meaning "dead."

The Woiworung tribe, according to the information given to me by the sole survivor, Berak, whose songs have been already brought before the notice of the Institute in a previous communication,¹ made much use of gestures, and from the examples which he has given me, and which will find their place in a future memoir, they would even bear some comparison with those of the copious gesture language of the Dieri.

Between these two examples would be placed the mountain tribes of Maneroo, in which, so far as I can learn, gesture language was used to a greater extent than by the Kurnai, but to a less extent than by the Woiworung.

The first time that I saw some of the Cooper's Creek blacks, I was struck by the use of gestures by them, and especially the raising of the hand high above the head, and the waving of the hand from the person; this I took at the time to be either a defiance or a command to depart, but in reality they were the signs for peace and for enquiry as to our own movements. Afterwards, when I became better acquainted with these tribes, I came to see that these gestures were part only of a complete system of hand signs by which a person might be interrogated, informed, welcomed, or warned.

Some of the signs which I am now about to describe, I have seen and have myself used. For others I have to thank the communications of my correspondents, Mr. Gason, the Rev. H. Vogelsang, and the Rev. C. A. Meyer.

To hear. Raise the face upwards slightly and sideways as if listening, or point to the ear with the forefinger.

To see. Look straight forward and nod the head several times.

Astonishment. Clasp the hands together several times in front of the body, and give the face an expression of surprise (V.).²

¹ "Songs and Song-makers of some Australian Tribes," "Journ. Anthropol. Inst.," February, 1887, vol. xvi, p. 327.

² The capital letter attached refers to the name of the informant.

Above. The head is bent back and the eyes look upward, the right arm being held higher than the head and above it (V.).

All gone away. The two hands being placed together horizontally in front, palms downward, separate them in a sweep outwards apart. Then point to the horizon in the direction in which they are gone (V.).

Anger, sulky, obstinate, unwilling. Extend the lips outward in a pouting manner (G.).

Bad. Avert the face and screw up the mouth and nose as in disgust (V.).

Boomerang. Use the action of throwing this weapon (V.).

Before. The hand being held level to the waist, move it in front (V.).

Behind. The hand being held level to the waist, move it to the rear (V.).

Be quiet. Pass the right hand, open and palm inwards, in front of the face and a little distance from it (V.).

Be quick. Hold up the right hand somewhat high with the arm extended. Move it several times quickly downwards diagonally from right to left (V.).

Bring here. Extend the hand, palm upwards, fingers slightly curved as if to receive something. Then draw the hand towards yourself (V.).

Bring together, collect, heap up. Extend the arms with the palms of the hands towards each other, then draw them towards the body several times (G.).

Camp and sleep. Recline the head on one side upon the hand as if sleeping (V.).

Child. Place both hands behind the back as if carrying a weight (V.).

Companions. Hold up the fore and middle finger of one hand, then lightly snap the fingers and thumb (V.).

Cut. Draw the forefinger of one hand across the other hand (V.).¹

Come here. Beckon with the right hand towards yourself (V.).

Come on. Extend the hand and arm straight out. Then bend the arm towards yourself. Repeating this action several times means "come quickly" (G.).

Danger—Be careful. The action as of catching a fly with the right hand close to the mouth, and squeezing the closed hand together there (G.).

¹ There was a man of the Yantruwunta tribe, whom I frequently saw but whose name I never knew, excepting by the gesture which distinguished him, and which meant "broken arm." It was made by striking the radius of the left arm with the open right hand, held vertically.

Dog. Turn the forefinger of the right hand round the ear, and then point to the ear (G.).

Down here, this place. Extend the arm, slightly bent, with the hand open and vertical. Then make a scooping motion with the hands inwards (G.).

Dead—corpse. Bring the two hands together, then make a motion with them as if you were concealing something in them (G.).

Doctor—Wizard. Draw the head in between the shoulders, draw the forefinger down the nose, cross the arms over the breast, and then first stroke down each arm with the other hand, and then pass both hands over the stomach (V.).

Drink. See *Water*.

Disgust. Screw up the mouth and nose as if you were smelling something unpleasant.

Eat. Imitate the act of putting something into the mouth and then eating (V.).

Enough. Nod the head, and then move the hand, palm outwards, from the face. Or, pat the stomach gently several times with the open hand, then move it several times away from the stomach sideways (V.).

Enquiry—Who are you? What is it? Hold the hand in front of and a little lower than the left breast, palm downwards, then move it from that position to one in front of, level with and at the distance of the forearm and hand from the left breast. During this movement the hand is turned from being palm downwards to palm upwards (H.).

Emu. Hold the hand out. The forefinger and little finger extended, and the thumb and other fingers closed (V.).

Fight. Hold the two hands as high as the head as if grasping something. Then strike with them in all directions (V.).

Feather head-dress. Lay hold of the hair of the head with one hand, and with the other imitate the action of sticking something into it (V.).

Go away. Hold the right hand near the face, palm outwards, as if holding something. Then act as if throwing it away (V.).

Give me. Hold the arm outward a little bent, the hand palm upwards and the fingers slightly curved, as in the act of receiving something (V.).

Hear—I hear you—I understand. Extend the hand over the head as high as possible, then stoop and reach as far as you can, until the hand nearly reaches the ground. This is done quickly (G.).

Hear—I cannot hear you—I do not understand. Fan with the hand rapidly about two inches from the ear. These signs are used when persons are out of speaking distance (G.).

Halt—stop. The hand, palm downwards, is held a little in front, about breast high. The hand is now moved several times towards the ground. Or, embrace the body with the two arms, each hand holding the upper part of the other arm, and draw yourself together as if feeling cold (V.).

I or Me. Drawn a line down the face (down the nose), with the forefinger. Or, tap the breast lightly with the forefinger of one hand (V.).

Kill. Short blows are struck with one hand into the other hand. Or, clench the fist and strike with it several blows downward (V.).

Large. Clench the fist and strike downwards; for very large, strike a longer blow with more force (G.).

Long way—far off. Extend the hand quickly, at the same time bending the body forward and snap the fingers (G.).

Look out! Attention! Danger! Suddenly point in the direction of danger to which attention is to be directed (V.).

Man. Clutch the beard at the chin, and shake it once or twice (V.).

Man (old). Tap lightly several times on the top of the head with the hand (V.).

Mother. Take hold of the breast with one hand and shake it several times (V.).

No! Nothing! Shake the right hand, the palm downwards, the fingers loosely dependent and slightly separated. The action is that of shaking something from the fingers (V.), or, shake the head (V. and S.).

Peace. Stand erect and hold both hands high up above the head, palms outwards; or, hold up the right hand above the head, and shake it as in the sign for "nothing" (V.).

Request for or an offer of a female. The two hands being held in front, palms inward and slightly curved, close them together, the forefinger of the right hand passing between the forefinger and thumb of the left hand, and the left thumb between the forefinger and thumb of the right hand. The four fingers of the left hand close over the back of the right, and the little, ring, and middle finger of the right inside the palm of the left (H.).¹

Snake. The hand and arm extended. The hand is steadily moved from right to left several times (G.).

Silence—say no more. Stoop, and extend the arms full length outwards, the thumbs being turned inwards. This sign is used by the old men to the young men if they are misbehaving themselves, and it signifies "strangling" (G.).

¹ According to the Rev. H. Kempe, this sign is used just as I have given it above, and with the same meaning, by the Aldolunga tribe at the Friske River, South Australia, far to the north-westward of the Dieri.

Spear. An action as of holding a spear in the right hand and piercing something with it (V.).

Shield. The left hand is held clutched in front of the face and a little distance from it (V.).

*Sword (wooden).*¹ The action of holding this weapon with both hands and striking with it (V.).

String (man's belt). Imitate the action of winding something round the waist; or, for string only, imitate the action of twisting fibres with the hand on the thigh (V.).

Surprise. Draw the lips together (G.).

Thirsty. Make the sign for water, and then make the sign for give (V.).

Tomahawk. An action as of chopping with the right hand (V.).

What?—What do you say? Throw the hand up higher than the head and then gradually let the palm fall back, palm upwards (G.).

Water (fresh). With the right hand held in the form of a scoop, the palm being towards the body, imitate several times the action of passing water into the mouth (V.).

Water (salt). Point with one finger to the mouth, touch the tongue with it, and then spit several times (V.).

Woman. With the forefinger of each hand describe a circle round the breasts (G.).

Woman (old). With the forefinger point to the breast. Then describe a circle several times with it (V.).

Water bowl. Hold the left hand, palm upwards, partly closed to resemble a bowl. With the other hand also closed bowl-shape, make a motion as if scooping something out of the other hand (V.).

Yes. Make a movement with the hand as of catching a fly about a foot distant from the mouth (G.), or nod the head (V.).

§ 11. *Summary and Conclusions.*

The preceding sections render it now possible to summarise some of the conclusions at which I have arrived as to the Dieri tribe, always bearing in mind that it is the type of others in the same part of the Australian Continent, and with slight variation of custom also represents communities at a further distance. The facts now recorded as to these tribes show that aboriginal society as it exists in Australia is organized in a comparatively complete manner, and is not, as some

¹ This weapon (Marawiri) is some four to five feet in length, boomerang-shaped, of heavy wood, and is used with both hands at close quarters,

have supposed, but little more than the fortuitous aggregation of a number of human beings in a low stage. Their society is organized in a manner that is in full accord with their wants. It is based upon the relations of the sexes regulated according to their conception of morality. Their ideas of morality and our ideas of morality are not the same, but the moral sentiment is as strong in its way with them as with us.

The fundamental principle upon which their social structure has been formed is a prohibition against marriage, using that term in a wide sense, between those who are according to their ideas of near kindred. With them the conception of nearness of kin depends upon their view of the line in which descent runs, and descent in these tribes is counted through the mother. The Pirauru practice is clearly a form of group marriage, in which a number of men of one exogamous division cohabit with a number of women of the other division. The children of this group necessarily also constitute a group in which the members are brothers and sisters, and between them marriage is prohibited.

Here we find the idea which underlies the prohibition of marriage within the class division. All in it, in any given level of the generation, are brothers and sisters. The preceding level in the generation is the group-progenitor of the fraternal group, and this latter in its turn produces a group of children which stands in the filial relation to it. Here we have the actual fact as it exists in the Pirauru group, and this pictures to us the former condition of the class divisions, which condition has been fossilized, so to say, in the relationship-terms used.

The classificatory system of relationships, to use the term employed by the late Dr. Morgan, has been a great stumbling block in the path of many anthropologists, who in following their lines of enquiry have been guided by ideas in which they have grown up from infancy, as to the nature of the relations which exist between individuals. It has probably not suggested itself to them that since our system of counting relationships arises out of and is fitted to the conditions of our society, it might be that savages whose social conditions are so different may require some terms to define their relationships quite different in their character to those which we have. This error has probably arisen from considering a savage as a human being who in a rude exterior thinks much as does a civilized man. Such an idea cannot have a sound foundation. We see its results perhaps in the most marked form in the writings of Rousseau, but even late writers are not free from it.

The late Mr. J. F. McLennan, in his work on "Ancient Society,"



has argued backwards from the fragmentary and often imperfect accounts given by travellers to what he conceives must have been the origin of social institutions. He has regarded these matters not as one of the people would do whose customs he discusses, but as a civilized man seeing through civilized eyes, and with a mind nurtured in the ways and thoughts of civilization.

The works of this author might have been left without further remark were it not that in a late edition¹ of "*Studies in Ancient History*," no regard has been paid by the editor, Mr. McLennan, to the great mass of entirely new evidence which has been collected from the Australian field by the Rev. Lorimer Fison and myself, with the exception of a few remarks in the Appendix, to which I desire to draw attention. The first, which occurs at p. 311, runs as follows:—

"The theories of Mr. Morgan's ingenious disciple, the Rev. L. Fison (Kamilaroi and Kurnai), are all more or less founded on the fact that terms of relationship are in use among the Australians as terms of address. A correspondent whose means of getting knowledge are usually very imperfect, reports in answer to a question that certain rather large classes of people or whole populations, as the case may be, call each other brothers and sisters, or whatever other terms suit their respective ages, and Mr. Fison forthwith assumes that throughout these classes or populations there is full acknowledgment of blood relationship."

I cannot imagine anything more unfair than this statement, unless it be the second passage, which will be found at p. 315, which runs thus:—

"Mr. L. Fison (Kamilaroi and Kurnai: Melbourne), while not accepting the consanguine family on which Mr. Morgan's whole system rests, professes himself a believer in punaluan marriage and the punaluan family. But Mr. Fison's hypothesis, as stated in the work above mentioned, is not quite the same as Mr. Morgan's. Mr. Fison's 'intermarrying classes,' by the way, have sometimes been taken for matter of fact; but they are a hypothesis only."

Very little need be said, but it is not possible to pass over in silence such statements. The author ignores the mass of evidence which has proved that the relationship-terms are real, and not, as he desires his readers to believe, mere "terms of address," and that the intermarrying classes are indisputable matters of fact. It would be pleasant to be able to believe that

¹ "*Studies in Ancient History*, comprising a reprint of *Primitive Marriage*," by the late John Ferguson McLennan. A new edition. London, Macmillan & Co., 1886.

the astounding statements which I have now quoted have arisen out of mere want of acquaintance with the evidence by Mr. D. McLennan. But I regret to feel that this belief can scarcely be held, and that these statements must be regarded as the arguments of a partizan who desires to fortify some position. If this is the case they may be allowed to fall to the ground without further concern.

I have already shown how the marriage status in these tribes is of two kinds. There is first, individual marriage, and second, group marriage. The former may be spoken of as Noa marriage, and the latter the Pirauru marriage. In the former, the woman becomes the wife of a certain man by being promised to him as a child by her father. In the ordinary course of everyday life his right to her is paramount, but under the Pirauru practice this sole right to her is overruled by the right given to certain other men by the Council of Elders of the Tribe. Thus although on ordinary occasions the individual right of the Noa prevails whenever he is present, yet on certain other occasions, especially ceremonial ones, the group right becomes paramount.

One question shows itself at once in regard to these two forms of marriage—Which is the earlier one? Has the Pirauru group usurped some of the rights of the individual Noa, or is the reverse the case. To ask the Dieri this question would probably fail in a reply, but some light may be found to illumine this obscure question by taking a general glance over the customs of Australian tribes. I have found after gathering data for many years that the various Australian tribes of which I have accounts, may be placed in a series arranged according to their social organization, and especially with reference to their status of marriage, and the relations of the sexes in them.

The result of such a classification would be that the Dieri would stand close to the one end of the series, and such tribes as some of the Kamilaroi of New South Wales and the Kurnai of Gippsland at the other. The former would be found to have a strongly marked form of group marriage existing at all times, and modifying the rights of the individual husband. The latter would be found to have individual marriage absolutely established, with the exclusive right of the husband to his wife unless relinquished by his voluntary act. But at the same time there would be found rare occurrences of extensive license, in which the features of the Pirauru practice can be distinguished.¹

¹ In the times when the Kurnai tribe still retained its ancestral customs, the occurrence of the *Aurora Australis* ("Mungan's fire"), caused a temporary promiscuity amongst those who might otherwise have stood in marital relation to each other, the strongly established individual marriage being for the time in abeyance.

Between these two extremes would be found tribes in which the occasions of license are more frequent, producing what seems to be a temporary reversion to group marriage, or the right of the group to certain women.¹

Such an examination would lead to the conjecture that the change in social organization has been in the direction from group marriage to individual marriage and not the reverse; in other words, that the Pirauru is the older form and the Noa the more modern. Moreover, if an examination is then made of the relationship terms, it will be found first, as I have shown in § 4, that they fall into a set of groups indicating certain individuals who all have the same relation to some one person. The nature of these relations is logically deducible from the fundamental law of the divisions of the community into two intermarrying exogamous classes, each of which constitutes a group organized after the Pirauru arrangement; a group, that is to say, wherein there is Pirauru marriage between certain men and women, of one level generation, and this group is the group progenitor of the next following one, and stands in a filial group relation to the preceding one.²

These group relationship-terms in no wise fit with the status of individual marriage, but they do so with that of group marriage, as is shown by Pirauru groups, which may be found in actual existence in the Dieri and other tribes at the present day.

Thus then we have two independent lines of enquiry which point each to the conclusion that group marriage was the earlier marriage status, and that the individual (Noa) marriage has been developed later, and has encroached upon the marital rights of the group. What the causes may have been which have led to this change of status as to marriage it is not easy to say; but it is open to strong and probable conjecture that one, and perhaps not the least active of all agencies, has been the rise and establishment of the right to give away a girl in marriage to some particular individual of the group which intermarries with the group to which she belongs. This is a very common custom in Australian tribes, and must have been a powerful agent in producing a feeling of ownership in the husband. The further rise of individual possession would also bring about a sense of individual paternity as regards the wife's children which could not exist under group marriage, and which, as Mr. Gason shows, does not exist under the Pirauru system.

¹ *Jus primæ noctis*, e.g., Kuin Murbura tribe, Rockhampton, Queensland.

² This view explains why, in many tribes, a person calls one of his father's class or totem, who is older than himself, "father," and so on as to other relatives. These persons may be spoken of as the tribal relations. The Wakelbura tribe of Northern Queensland is an example, according to Mr. J. C. Muirhead.

When a community was gathered together at some one spot on ceremonial or festive occasions, group marriage would have full effect. When, however, the community was scattered over the tribal country, the tendency would be for the group to break up into lesser groups and even into couples. Here again would be a tendency under the impulse of individual liking to the rise of individual marriage.

Thus one is led to the conclusion that the earlier status of marriage in Australian tribes was the cohabitation in common of a number of men of one of the divisions with a number of women of the other division, and that there has been a gradual and probably a slow development of individual marriage. To those who regard the customs and the social organization of savages as a representation of the condition of the early ancestors of civilized peoples, the conclusions which are thus reached by a consideration of the socially lowest-standing Australian savages, must be of great significance as pointing to a yet earlier condition of society still lower in organization than that of the two exogamous divisions of a community, each living in a state of what may be called promiscuity as regards the "level in a generation."¹

Even in the tribes herein described there are traces of such absolute promiscuity as in the occurrences connected with the *jus primæ noctis* of the Kunandaburi and the license permitted on some few occasions by the Dieri even beyond their ordinary practice. Such occasional occurrence of extreme license on certain ceremonial occasions points, it may be thought, to a former general practice, and such a practice is indicated by some of the relationship terms.

If these views prove to be well grounded and become accepted by anthropologists, the conclusions reached by the authors of some standard works must necessarily be abandoned or modified.

One of the earlier works dealing with society in its primitive stages was that of Bachhofen. In *Das Mutterrecht* he evidently had got on the track of some truths. He saw dimly and as shadows the former existence of that social state in which descent is counted through women, and he built thereupon a vast and grotesque fabric of a primitive "gynocracy."

McLennan in his able work on "Primitive Marriage," reached a still higher point of view, and his horizon being proportionately enlarged, he came to the conclusion that the earliest form of society was one in which, owing to the scarcity of women, a number of men were compelled to marry one woman in common.

¹ Taking a generation to extend from grandparents to grandchildren.

He on this reached the conclusion that society commenced in "Polyandry," and it seems that the foundation for this hypothesis is in statements of travellers as to the existing customs of the Thibetans and Nairs.

Sir Henry Maine, in a series of remarkable works, threw a flood of light upon the condition of society in the Aryan races at the dawn of history, and connecting with this the historic evidence of the Semitic race, he reached the conclusion that society originated in "Patriarchy," wherein the family was grouped round and under the authority of the oldest male descendant, who claimed the right to appropriate to himself a number of women, thus producing "Polygamy."

It is evident that all these writers held a certain measure of truth, and from their individual standpoints the horizon appeared such as each described it. But their horizons were not all the same, and beyond them still extends the great unknown and silent part of man's social history. It seems to me that it is to the study of the beliefs and institutions and the myths of savages that he must now look for side-lights by means of which he may be able with more or less certainty to discern the features of the tracts lying beyond the ken of history.

This memoir proves conclusively that in Australia at the present day group marriage does exist in a well marked form, which is evidently only the modified survival of a still more complete social communism.

The study of the tribal and social organization of the Australian savages and their beliefs and customs promises to yield the most valuable results, and I may venture to claim that the results of the studies which have been made upon these subjects by the Rev. L. Fison and myself have not been barren of results.

Explanation of Plate I.

Sketch-map of part of Central Australia, showing approximately the geographical distribution of the Dieri and kindred tribes referred to in the preceding Paper.

ANTHROPOLOGICAL MISCELLANEA.

ANNUAL REPORT of the BUREAU of ETHNOLOGY, SMITHSONIAN
INSTITUTION, 1883-4, 1884-5.

The Smithsonian Institution has issued simultaneously the fifth and sixth Annual Reports of the Bureau of Ethnology, bringing the publication up to the year 1885.

It is needless to say that these handsome volumes contain much interesting and important matter. American anthropologists have a wide field, and are not so restricted in means as their English brethren; consequently, their researches are more thorough, and their reports are minute and exhaustive.

In the present volumes we get first, the reports of the director with regard to the work of the year, both in the field and in the office, with the papers illustrating the work of the explorers. Mr. Cyrus Thomas and his assistants have been engaged in exploring the mounds and other ancient works of the United States, east of the Rocky Mountains, and in so doing have made some very interesting discoveries; chief among which may be noticed several plates of copper very thin and evenly wrought, upon which are impressed, as if by machinery, figures bearing a striking resemblance to those found in the Mexican and central American codices. These remarkable works of art were found in what is known as the Etowah group of mounds in Northern Georgia, in which were also found some of those curious engraved shells described and figured in the second volume of the same publication. Of these copper plates the director remarks, "The skill and art manifested in their manufacture are far in advance of anything hitherto discovered appertaining to the mound builders, and raise a serious doubt as to their aboriginal origin," whilst the conditions under which they were found "clearly indicate that they were placed in the mounds when the latter were built, and not subsequently."

The conclusions at which Mr. Thomas arrives in consequence of these and other discoveries are:—

1. That different sections were occupied by different mound building tribes, in much the same stage of culture, but differing in habits and customs.
2. That each tribe adopted several different modes of burial, depending probably upon the social condition, position, and occupation of the deceased.

3. That the custom of removing the flesh from the bones before final burial prevailed extensively, and the bones of the common people were gathered in heaps promiscuously, and a mound raised over them.
4. That, although some religious ceremony took place in which fire played a prominent part, there is no evidence of human sacrifices.
5. That there is nothing to show that the mound builders had attained a higher degree of culture than that of some of the Indian tribes at the first arrival of Europeans.
6. That mounds were erected over the dead in several localities in post Columbian times.
7. That the mound building age could not have continued longer than a thousand years, and hence its commencement probably does not antedate the fifth or sixth century. That nothing has been found to justify the opinion of their great antiquity.
8. That all the mounds examined are to be attributed to the tribes found inhabiting this region and their ancestors.

The director, whilst endorsing the views of Mr. Thomas in most respects, justly points out, with regard to the seventh proposition, that "an attempt to fix the duration or beginning of the mound building period, is unadvisable in the absence of evidence not yet obtained, and which may never be forthcoming."

Although Mr. Thomas believes that the copper plates above referred to, were not the work of pre-Columbian, Indian, or Mexican workmen, the work bearing evidence of having been done with hard metallic tools, he fails to give any European or Asiatic analogues.

It must be observed that these works are found only in Northern Georgia, and in Northern and Southern Illinois.

One very curious discovery made by Mr. Mindeleff whilst excavating a pueblo in Arizona must be noticed.

In a marginal room in the pueblo was found "a circular doorway, made of a single slab of sandstone, pierced by a large round hole."

This would appear to bear a close resemblance to the Cornish Men-au-tol, but, as it is not figured, it is impossible to say more.

The narrative of Mr. Charles C. Royce relating to the Official Relations of the Cherokee Indians with the Colonial and Federal Governments, although containing much important historical matter, illustrated by excellent maps, will not greatly interest English readers, except as illustrating the migrations of a nation in modern times; but the paper called "A Mountain Chant," being a description of a Navajo ceremony, will delight the Anthropologist and Folk-lorist. It would be impossible in this short notice to give any idea of this very long and interesting paper, containing so many descriptions of dances and ceremonies among the Navajo Indians, with the myth from which they originated, and illustrated

by many excellent engravings and coloured plates. The dances appear to be religious medicine dances, undertaken primarily for the healing of the sick and invocation of the gods. The points of resemblance to the Australian corroboree are numerous; the use, also, of that widely distributed instrument, the bull-roarer or groaning stick, which in this case must be made only of the wood of a pine which has been struck by lightning; the painting of the body in black and white, the great plumed arrow, the talking sticks, the plants used, and the songs and incantations, are all of very great interest; and it is not a little curious to find in the myth a story resembling that so frequent in our own fairy tales, in which the hero is invited to eat and drink, but receives a friendly warning not to do so, lest he should turn into some animal and never regain his own form. The four great pictures are remarkable and very instructive as regards the symbolism of the Navajo Indians, which perhaps may help to interpret some of the Mexican paintings. The appearance in one of them of the *swastika* is also of great interest.

The remaining papers in this volume are: one on the Seminole Indians of Florida, by Clay Macaulay, with illustrations representing the people and their costumes, their architecture, industries, &c., all which deserve careful study; and lastly, "The Religious Life of the Zuni child," by Mrs. Tilly E. Stevenson, which may be regarded as supplementary to the papers on the Zunis by Mr. Cushing, which have appeared in former volumes. This paper is also beautifully illustrated in colours, and contains a short account of Zuni mythology, birth customs, and initiation ceremonies.

In the second of these volumes the paper which will be read with the greatest interest is that upon "The Central Eskimo," by Dr. Franz Boas, which, taken in connection with those of Dr. Rink which have appeared in the *Journal*, may be said to give an exhaustive history of these very interesting people. The plans of houses, the sledges, boats, and weapons, and the tattoo marks of the women, are well illustrated; whilst the social life, the games, the religious and superstitious ideas of the people, are fully described, and the comparisons between the traditions of the Central Eskimo and those of the tribes of Greenland and Alaska are instructive. Dr. Boas also gives a number of Eskimo sketches, and songs with the airs to which they are sung.

The paper by Mr. Holmes on "Ancient Art of the Province of Chiriqui, Columbia," is a very valuable addition to our knowledge of a land and people very little known to Europeans. Several curious problems are presented by the objects found in the graves in this region, which appear to have been made for mortuary purposes, and not to consist, as is usually the case, of articles used by the deceased or his friends. Although they appear to have been skilful metal-workers, and even understood the art of coating copper with a thin plate of gold, they do not seem to have used metal tools. Their pottery was very elegant, resembling in form

the archaic Greek vases, but presenting also many grotesque animal forms, some being painted in geometrical patterns.

Mr. Holmes contributes another interesting paper to this volume on "Textile Art in its relation to the Development of Form and Ornament," well illustrated. Nothing in modern work seems comparable with an ornamental fringed mantle from an ancient Peruvian tomb figured by Mr. Holmes, in which rows of human faces are represented on raised rosettes surrounded by tassels, and terminating in a fringe of various colours, twenty inches deep, composed of tassels of various sizes, all of fine silky wool, and of a rich crimson colour. Mr. Holmes derives the arabesque style of ornamentation from the art of the weaver. How far he has proved his theory, readers of the paper will be able to judge.

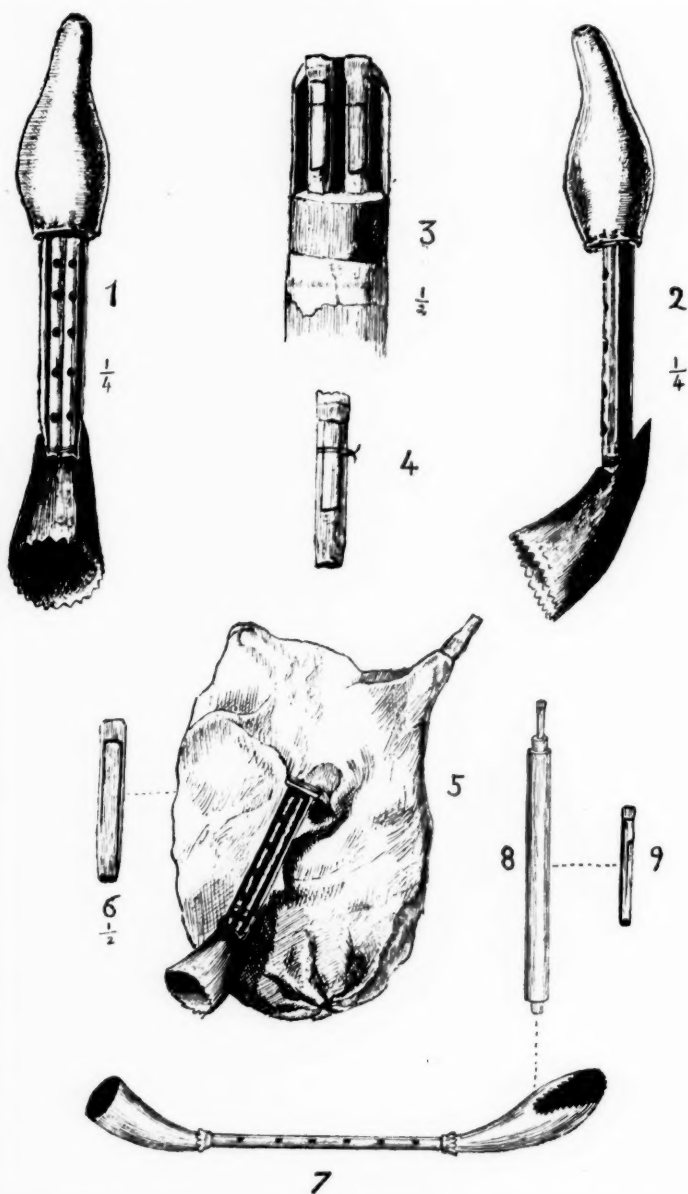
The remaining paper on "Aids to the Study of the Maya Codices," by Cyrus Thomas, is one more for the student than for the general reader. If Mr. Thomas can succeed in deciphering the meaning of these Maya hieroglyphs, he will render a service to American archæology which may compare with the work of Egyptologists and readers of cuneiform. His present conclusions are that the Maya characters have grown out of a pictographic system, similar to that common among the Indians of North America.

Undoubtedly the two volumes before us contain an immense amount of information on a variety of topics, and will afford the student much food for thought, and probably not a little controversial matter; but it is in churning the ocean of controversy that Truth comes to the surface.

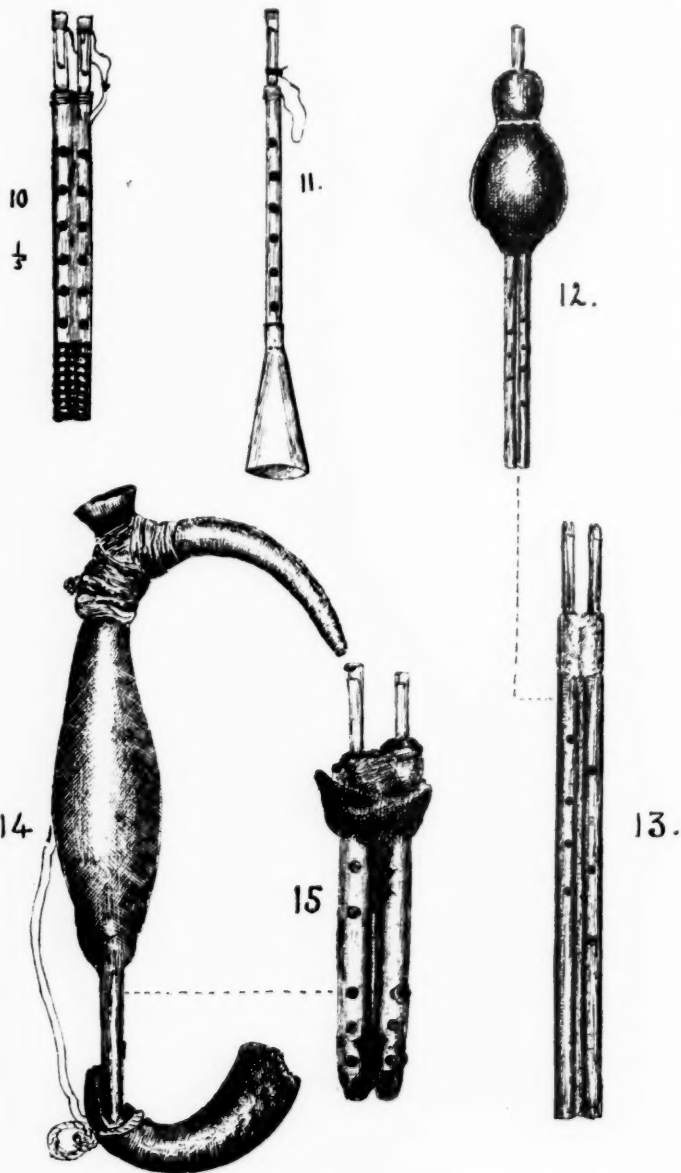
A. W. BUCKLAND.

THE BRITISH ASSOCIATION.

The Sixtieth Annual Meeting of the Association will be held at Leeds, commencing on September 3rd, when Professor Flower, the President, will be succeeded by the President-elect, Sir Frederick Abel. In Section H, devoted to *Anthropology*, the President will be DR. JOHN EVANS; the Vice-Presidents, Professor Cunningham and Mr. Rudler; and the Secretaries, Mr. Bloxam, Dr. C. M. Chadwick, Dr. Garson, and Mr. Ling Roth. Papers to be read should be sent in not later than August 6th, addressed to "The General Secretaries, British Association, 22, Albemarle Street, W."



HORNSPIPE AND BAGPIPES, GRECIAN ARCHIPELAGO ; AND PIBCORN FROM ANGLESEA.



ARAB REED PIPES, DECKHAN PIPES, AND HINDOO HORNPIPE.